

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT TACOMA

4 SYNTRIX BIOSYSTEMS, INC.,) Docket No. C10-5870BHS
5 Plaintiff,) Tacoma, Washington
6 v.) March 14, 2013
7 ILLUMINA, INC.) JURY TRIAL DAY 11
8 Defendant.)

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1 THURSDAY, MARCH 14, 2013 - 9:00 A.M.

2 (Jury not present.)

3 THE COURT: Good morning. Everybody ready to roll?

4 MR. ALBRIGHT: Yes, sir.

5 MR. ROSENBAUM: Yes, Your Honor.

6 THE CLERK: Please rise for the jury.

7 (Jury present.)

8 THE COURT: Please be seated. Good morning. We are
9 ready to proceed with closing argument. You have your
10 instructions back there with you. You can follow -- sometimes
11 the lawyers may make reference to an instruction, and so
12 you'll have them there to refer to. The first to make an
13 opening argument is the plaintiff.

14 The plaintiff has the burden of proof on this, on its
15 claim, and has the right under the rules to proceed first, and
16 that will be followed by the defendant, Illumina, and
17 following that argument then the plaintiff again under the
18 rules has the right to have the last word.

19 So you may proceed.

20 MR. ALBRIGHT: Thank you, Your Honor. May I
21 approach?

22 | THE COURT: Yes.

23 MR. ALBRIGHT: Thank you, sir.

24 May it please the Court: Good morning. We begin the
25 final chapter of a journey that has taken Dr. Zebala 16 years

1 to get to. I think I speak for everyone to my left, counsel,
2 the parties, when I say thank you for your time and service
3 over the last couple of weeks. We appreciate your patience,
4 we appreciate your attention.

5 If I could have the first slide, please.

6 Three weeks ago, we started. Three weeks ago, we gave
7 opening arguments and both sides told you what their cases
8 would be about. We, as the plaintiff, made certain promises
9 to you with respect to what we would show during the trial.
10 We believe we have delivered on every one of those promises,
11 and I am going to walk through now and remind you what we
12 believe the evidence has shown.

13 We told you right from the beginning that what Dr. Zebala
14 had done 16 years ago was something very special. We believe
15 it was something that was revolutionary. It resulted in the
16 '682 Patent. We believe that Illumina has taken his idea and
17 used it, and that's why we've had this trial.

18 What have we proven?

19 Next slide, please.

20 We believe that we have shown you the evidence of
21 Dr. Zebala's inspiration. For example, we've shown you the
22 prototype that he built. This is the box of Kodachromes that
23 he took, the evidence of what he did. This is the notebook
24 that you saw all the pages of. They are all in evidence.

25 This is what he did after he left the lab. This was how

1 he turned his ideas into patent applications.

2 We've put up the first day for you. We believe it's very
3 important to make sure we all understand the timelines in this
4 case. We believe one of the most important dates, if not the
5 most important date, is that of August 5, 1997 because that's
6 the date that Dr. John Zebala invented what became the '682
7 Patent.

8 The Court has told you that in this case, you are going to
9 have to answer a question about what day the invention is, and
10 the Court has told you this: The day of invention is either
11 when the invention was reduced to practice or when conceived.

12 That's the date of conception, August 5, 1997, provided
13 that the inventor was diligent in reducing the invention to
14 practice. Diligent means working continuously, though not
15 necessarily every day.

16 Ladies and gentlemen, this is diligence. Imagine what it
17 took him to accomplish that by himself. When I was in junior
18 high, they punished me by making me write down extra pages of
19 the dictionary. I sat there for hours. Think how long it
20 would take just to write that, let alone do the research; let
21 alone take from the notebooks, what all went into the
22 invention, and to try to make sure you get it absolutely
23 right, because if you ever do have to go to trial, someone is
24 going to go through every single thing you wrote and challenge
25 you on it. It's not like it's a just cookbook process.

1 So what's the next date? The next date is the date that
2 he filed the provisional application, December 1, 1998. At
3 that point, with respect to the patent office, the line is in
4 the sand. From then, there's a patent pending. What does
5 Dr. Zebala do? Now that he's got his idea in the patent
6 office's hands, now that he's protected when he started, he
7 can chase his dream.

8 His dream, after going through medical school, after being
9 a resident, his dream is to become an entrepreneur, to take
10 this idea of how to do a microarray, and he goes out and he
11 starts talking to companies. One of those companies is
12 Illumina. He reaches out to Dr. John Stuelpnagel, who's the
13 CEO of Illumina.

14 You heard in opening argument that it was a cold call. It
15 absolutely was a cold call. Dr. Zebala called him up and
16 said, I'd like to talk. And Dr. Stuelpnagel said, your idea
17 sounds interesting, we need to do an NDA and then we can move
18 forward. They sent him an NDA. You've seen that in evidence.
19 I believe it's Exhibit 7.

20 Of course, what Dr. Stuelpnagel told you -- and you will
21 recall he was one of the witnesses that appeared by
22 deposition -- was that he doesn't remember talking to
23 Dr. Zebala. He doesn't remember signing the NDA, but he
24 grudgingly admits that might be my signature. He doesn't
25 remember getting a package of all the ideas that Dr. Zebala

1 sent. What's our evidence?

2 If I could have the next slide, please.

3 Somehow, Dr. Zebala managed to keep the evidence after
4 however many years it's been, and we showed you the Fed Ex
5 package, Exhibit 257.

6 Next slide, please.

7 We showed you what was in there. What's amazing about
8 that, what's amazing about what was in there is this isn't a
9 couple of drawings with stick figures on it saying hey, or
10 maybe something he blew up on a computer and said I'd like to
11 do a microarray like this; do you want to give me some
12 funding?

13 He sent them a blueprint of how to do the microarray, and
14 he sent it to them at a time that we know now that Illumina
15 had an alternate substrate committee -- maybe they didn't. We
16 know that Dr. Dickinson was working to find an alternate
17 substrate. They were searching for exactly this idea. They
18 knew they were going to go fiberoptic, but they knew they
19 needed something better. That's what he sent them.

20 And you heard -- that was the tape -- I made a joke, it
21 sounded like a 14-year-old boy. He went through and explained
22 everything about his idea. Imagine that 14, 16 years later
23 when he takes the witness stand and goes through and walks you
24 through and tells you what his ideas were, and then you hear
25 his voice from the year 2000 or the year 1999, and he's saying

1 exactly the same thing to these folks; exactly the same thing
2 about what his ideas were.

3 He uses the word "interstices." We call them "voids"
4 here. Exactly the same thing. He talked about it being
5 continuous. Everything you heard during the course of this
6 trial, if you want to go through that exhibit, I believe it is
7 Exhibit 330, you can hear again.

8 Next slide, please.

9 But Dr. Stuepnagel tells Dr. Zebala, "We're going in
10 another direction. We don't need your idea."

11 Next slide, please.

12 But then we learn through discovery in this case, we get
13 Dr. Dickinson's notebook, and what you see on the left, you'll
14 recall, is something that kind of looks like Dr. Zebala's
15 idea, only it turned out when we were talking to
16 Dr. Dickinson, that that's that little plastic piece that's
17 the size of a thumbnail, just the beginning of an idea, if
18 that.

19 What you see on the right is the image that Dr. Dickinson
20 put in his notebook. It's just an image. That image appears
21 two weeks, roughly, after Dr. Zebala sent Dr. Stuepnagel the
22 blueprint. If you look at the pages -- it's in evidence,
23 Dr. Dickinson's pages are in evidence. If you look at the
24 pages prior to this, fiberoptic, fiberoptic, fiberoptic, bam,
25 this image.

1 Next slide, please.

2 Dr. Dickinson files for a patent application and he
3 includes that image. But that's not even really what's
4 important. What's amazing is that when he tells the patent
5 office why he ought to get a patent, and later gets a patent,
6 he tells them that this is new. This is novel. This is
7 different. This is better than what Walt is doing. It is
8 better. It's different than fiberoptics. That's what he
9 tells the patent office.

10 Next slide, please.

11 You will recall this. The next date is when Sentrix --
12 it's October 31, 2001. It's when Illumina trademarks the name
13 Sentrix, and that was a pretty amazing day of testimony. We
14 first heard from Illumina witness, Dr. Barnard, who told us
15 it's an amazing story of coincidence. We had a contest at
16 lunch. We paid \$100 to the winner, and we got the name
17 Sentrix, and we sent it to the committee. That's the 1 in 8
18 billion chance.

19 Then we heard from the corporate representative on this
20 topic, and she said it took us several months, it was \$1,000,
21 and the winning name from the contest was Genetrix, not
22 Sentrix. What happened there? Well, it went to
23 Dr. Stuelpnagel and the committee, and they changed it to
24 Sentrix. And then in the same day of testimony, we heard from
25 Dr. Stuelpnagel. He was asked a question and he said, my

1 memory of it is our committee came up with it, and it's just a
2 bad coincidence. Three stories, three witnesses.

3 So let's move ahead. We told you in opening, we committed
4 to you, that we would show you why the '682 Patent was a
5 really big deal and why it was important to the BeadChip and
6 to Illumina. The BeadChip is released. We now know that the
7 SAM, the fiberoptic product, was basically a bridge product.
8 It's what got Illumina from their start-up days through
9 2005 -- not that it ended in 2005 -- but roughly 2005 is when
10 the BeadChip really took off.

11 In 2005, there's no question that Illumina lost \$144
12 million. The next year, because of the BeadChip, they went
13 from earning \$73 million to earning \$184 million. They were
14 on their way to finding a product that could compete with and
15 would ultimately overcome what Affymetrix was doing. And it's
16 obvious why.

17 You've seen it (indicating), the SAM, the BeadChip. It's
18 like everything in technology; it's smaller, faster, more
19 dense, better. What was the foundation for that BeadChip?
20 You saw it earlier. It's this patent, right here
21 (indicating).

22 Next slide, please.

23 So what happens next? Dr. Zebala gets an email from an
24 old friend who says hey, you might want to look into this
25 product that Illumina is making. He contacts Dr. Stuelpnage1.

1 Dr. Stuelpnagel says basically, have your lawyer talk to my
2 lawyer.

3 Next slide, please. They go back and forth for a couple
4 of years without resolution.

5 Next slide, please.

6 The next event is that the '682 Patent is put into re-exam
7 in the patent office. You've heard quite a bit about that.
8 Dr. Zebala and Syntrix had to fight for two years in the
9 patent office during this re-examination. You know the
10 result; we won.

11 If I could have the next page, please.

12 That's the Certificate of Re-examination. We showed the
13 patent office that the art that was cited against us during
14 the re-examination, including the Walt '540 Patent, did not
15 invalidate the '682 Patent.

16 Next slide, please.

17 What happens then in the timeline? You saw this, at least
18 during our damages expert's case, but maybe during theirs as
19 well, you see the success that the BeadChip enjoyed. There's
20 just really no dispute over this. The numbers are what the
21 numbers are. At this point, you see that the goal of the
22 '90s, of being able to beat Affymetrix, had been met.

23 Next slide, please.

24 In terms of dates, let's look at where Illumina was before
25 the BeadChip and after. You saw before what the earnings

1 were. You see what the earnings are for the BeadChip. Over
2 \$1.6 billion in sales.

3 Next slide, please.

4 Now, we told you in opening argument -- and again, I want
5 to make absolutely sure you understand that when we made
6 promises during the opening, we intended to prove them during
7 the trial, and that's the point of me walking back through
8 some of these slides.

9 We told you that Illumina had gotten their hand caught in
10 the cookie jar. Next slide, please.

11 What they would do during the course of the trial, they
12 would tell you, we don't infringe. Seriously, we mean it. We
13 don't infringe. But if we do infringe, the patent isn't
14 valid. We mean that. The patent isn't valid. But if it is
15 valid, then we shouldn't ought to pay very much money for
16 having used it. We told you that they would give you those
17 three excuses, and they have. I am certain you'll hear
18 exactly those reasons in a little while when I sit down.

19 What did we do? What did Syntrix do to prove our case to
20 you in terms of infringement? We brought to you Dr. Metzker.
21 What did he do? You will remember, it took a day of your
22 lives. He went through each claim element, step-by-step,
23 step-by-step. He went through the patent. He went to --
24 basically, he stayed within the four corners of the claims of
25 the specification.

1 He showed you, just like if it was a recipe for a cake
2 that needed ten ingredients, he showed you that every
3 ingredient was there from the BeadChip with respect to Claim
4 1. And then Claim 125, of course, is a method claim, and so
5 if we've proven Claim 1, and we have shown the methods of
6 Claim 125, we have proven both of those. We relied on
7 Dr. Metzker, and he fulfilled every obligation he could have.

8 Let me go one slide forward, please.

9 Now, this is an example of the way Syntrix put on its
10 case, because we believe that the way to prove infringement,
11 the way to prove validity, the way to prove the technical
12 facts in this case is to point you to what's in the patent.

13 So for example, let's talk about a single layer of
14 particles. I am not going to go through everything
15 Dr. Metzker did. You've heard it. We don't have time. But
16 this is an example. How did Dr. Metzker tell you that the
17 BeadChip -- how did he prove to you that it had a single layer
18 of particles? Did he say, I am Dr. Metzker, and this is
19 Metzker on particles, or this is just my opinion, or this is
20 what someone skilled in the art? No.

21 This is a slide that you saw where he went through and
22 pointed to you in precise places in the patent where there was
23 a foundation for single layer of particles, and then he went
24 through and compared it to the BeadChip. We never strayed
25 from the context and the four corners, the fence, if you will,

1 that was the '682 Patent.

2 Next slide, please.

3 He also showed you this (indicating). This was an
4 infringement slide. This is the art of ten -- are all ten
5 ingredients in the cake slide. He walked you through this.
6 This is a side view of the BeadChip (indicating), and he
7 showed you how every element was there. He shows you the
8 particles. He shows you the substrate. He explained to you
9 the void regions in pink above and below (indicating).

10 He showed you the silicon oxide layer. That's the SiO₂
11 layer (indicating). That's the binder that makes up the
12 gelled network (indicating). He went through step-by-step,
13 and showed you infringement. He showed you how they all
14 assembled together in this one slide to make a porous coating
15 under the definition that was given by the Court with respect
16 to the *Markman* instructions for Claim 1.

17 Next slide, please.

18 Now, we've proved infringement of Claim 1 and 125. But
19 there's another side of the case, the invalidity side. Let's
20 talk about that. What did Illumina show you in their opening?
21 This was the board that they put up, and they told you, look
22 at this, look at all this stuff that was out there before and
23 after Dr. Zebala even came up with his invention. Look at
24 this morass of other art; his patent can't possibly be valid
25 given this quantity of other stuff.

1 Let me add one date to this, if we can. That's the
2 August 5th date we talked about, when we believe -- that's the
3 date of the invention. Let's look at what Illumina kept on
4 their board in their validity case.

5 First, we see three patents disappear, that they talked
6 about. Why did they disappear? The question is: Why were
7 they here in the first place? They weren't part of Illumina's
8 validity case. They only confuse you. You heard the only two
9 patents the Court has told you could invalidate our patent are
10 the Walt '540 Patent and the Walt '410. Those three patents
11 were completely irrelevant to the validity of the '682 Patent.
12 They were just a smoke screen. Let's move forward.

13 The Walt research disappears. The Walt research has
14 nothing to do with the validity of our patent. It was just
15 research done in his lab.

16 Next slide, please. Walt '540, Walt '410 are all that
17 matters. Those disappear, they are not relevant. Those were
18 Illumina presentations; nothing to do with validity, nothing.

19 One more slide. This is kind of a big deal. What you
20 just saw disappear, or what were known as the Chee --
21 C-h-e-e -- references, those disappeared between opening
22 argument and when Dr. Mrksich got on the stand to talk to you
23 about validity. I don't know exactly why. Maybe it's because
24 they had a decoding element that would show why the '540 and
25 '410 don't really validate. I don't know why they

1 disappeared. But what I want to make absolutely certain you
2 all understand is that none of the four Chee patents have
3 anything to do with whether or not the '682 Patent is valid.
4 Nothing. Just part of the smoke screen.

5 One more slide, please. Basically, everything after that
6 date disappears as well. So what are we left with? We are
7 left with the '540 Patent, from the opening argument that is,
8 of all of the things that they showed you that they intimated
9 might make it hard for us to enforce our patent, everything on
10 the slide, this is what we have left.

11 Then when we got to see Dr. Mrksich, we added one more,
12 which would be -- next slide, please. Actually, let me go
13 through the '540 real quick. Let me talk about the '540.
14 What do we know first? We know first that the '540 was
15 reviewed by the patent office during the re-examination. Let
16 me tell you what the Court told you in the jury charge about
17 that.

18 New evidence not considered by the examiner -- that would
19 be the Walt '540 -- may carry more weight than evidence
20 previously considered by the PTO -- I am sorry. "New evidence
21 not considered by the examiner may carry more weight than
22 evidence previously considered by the PTO." The Walt has now
23 been considered by the patent office.

24 "When a party attacking the validity of a patent" -- this
25 is the Court's orders -- "relies on prior art which was

1 specifically considered by the examiner" -- which was
2 specifically considered by the examiner, that's Walt during
3 the re-examination -- "during the prosecution of the
4 application leading to the issuance of the patent or during
5 re-examination of the patent, that party bears the burden of
6 overcoming the deference due to a qualified government agency
7 official presumed to have performed his or her job." The
8 deference that's owed to the PTO when they re-examined the
9 '540 Patent.

10 Next slide, please.

11 You have it as an exhibit, ladies and gentlemen. You'll
12 have the re-examination certificate showing that Walt was
13 considered.

14 Next slide, please.

15 Now, we are not coming in here and saying, hey, the patent
16 office looked at the Walt '540, you don't need to do anything,
17 we don't need to do anything. To the contrary. We had
18 Dr. Metzker take the '540 Patent and in the exact same way --
19 actually, I guess in the exact opposite way -- we went through
20 and said if this cake is here, what's missing?

21 Because remember, for the Walt '540, the Walt '410, for
22 you to answer that they invalidate our patent, you have to
23 find that those two patents have all ten ingredients for the
24 cake mix. Not nine, not eight. A B+ plus doesn't work for
25 invalidity, especially because the burden for invalidity is

1 clear and convincing evidence.

2 You remember the Court told you, we have to prove
3 infringement. It's our burden. That's why I get to go first.
4 The preponderance of the evidence. The scales lean in our
5 favor. Validity, because it has been reviewed by the patent
6 office, is a clear and convincing standard.

7 Dr. Metzker went through and showed you several elements
8 that were missing from the '540 Patent as well as the '410 for
9 both Claim 1 and Claim 125. If they are missing any
10 ingredient, they fail. And they weren't just missing one
11 ingredient. They were missing the substrate. They are
12 missing the continuous porous coating, substantially uniform
13 thickness. The '540 Dr. Metzker showed you has none of those.
14 But we weren't done there.

15 Next slide, please.

16 During opening, you heard that if we try to stretch our
17 patent to cover the BeadChip, it's invalid. Our patent is
18 invalid because the Walt '540 covers the BeadChip. Our patent
19 can't cover it also. If we make it look like that, if we
20 stretch it, then we bump into the '540 and the '540 was first.

21 But what did Dr. Walt, the inventor, tell you? I asked
22 him, "Does the BeadChip use fiberoptics?" He looked at me
23 like I was goofy. "Of course not, of course it doesn't use
24 fiberoptics." "Does the BeadChip use an optical signature for
25 decoding? "No, it doesn't."

1 I went through with you, claim by claim and asked
2 Dr. Walt: "Does this claim of the '540 require an optical
3 signature for fiberoptics or both?" And he said "yes" to
4 every one of those.

5 Dr. Walt admitted that the '540 doesn't cover the
6 BeadChip, and that's really an important admission in this
7 case for another reason because you remember when
8 Dr. Stuelpnagel was asked about whether or not he thought the
9 '682 Patent covered the BeadChip, he said, of course not.
10 It's covered by the Walt technology. And we now know from
11 Dr. Walt that the '540 doesn't cover the BeadChip. You all
12 know it doesn't cover because you all see that the fiberoptic
13 SAM and the BeadChip are completely different products.

14 I would like to show the video that the jury saw during
15 the earlier course of the trial, Your Honor. If we can just
16 stop for a second. Obviously you see the SAM on the left,
17 just for the record, and you see the BeadChip on the right.

18 If we could proceed, please. (Video playing.) You can
19 stop it right about there, please.

20 A picture is worth a thousand words. You look on the
21 left, you see the fibers, you see the fiber cladding. You see
22 it's necessary because you need to get light to travel through
23 the fiberoptics in this product. I saw some of you hold it up
24 to the light when you passed it around. You can see through
25 it. You can't see through the BeadChip. You don't need to.

1 It doesn't use fiberoptics. It's a solid flat piece of
2 silicon.

3 Can we keep going, please? (Video playing.)

4 Now, if we get to right about there (indicating), there is
5 no question that if you get at just the right angle, you will
6 see that both of them have wells that beads go into in a
7 random assembly. That's where the similarity stops. It's
8 like taking a picture of a jumbo jet and a Cessna 182 from
9 about 10,000 feet up and saying, look, they are both planes,
10 they look the same.

11 If we can keep going, please. (Video playing.)

12 Okay. Let me point out for you exactly what I just said.
13 You see the optical fiber cores (indicating) missing from the
14 BeadChip. You see the optical fiber cladding (indicating)
15 nowhere in the BeadChip. What do we see on the right? You
16 see the rigid coating of silicon dioxide, the polymeric
17 binder. You see the silicon substrate. These two products
18 are nothing alike.

19 Can we keep going, please? (Video playing.) Let's just
20 cut ahead. I am a little bit behind, and I want to catch up.
21 If we can go to next slide, please.

22 The '540 Patent doesn't invalidate the patent. It just
23 doesn't.

24 Re-examination, Dr. Metzker, Dr. Walt. Let's talk about
25 the '410 which got added during the course of the trial to the

1 time -- I am going to add the Walt '410 to this slide.
2 Now, the first thing you'll notice is that it comes after the
3 date of conception, after what we believe is the date of
4 invention.

5 If we could keep going, please. (Video playing.)

6 Actual reduction to practice -- keep going, please -- the
7 other reduction to practice when we filed the patent
8 application. And then what the green bar shows is what the
9 Court requires you to find that we did our due diligence, and
10 I won't go back over that. You heard Dr. Zebala's testimony
11 about what he did during that period of time.

12 Let's talk about the Walt '410. What did Walt say about
13 the '410? I asked him: "And the reason that the '410 Patent
14 was filed more than a year later was because Illumina wanted a
15 patent that would capture additional claims, right?"

16 "Answer: I would say that's actually putting --
17 that's not correct. I would say that it was really to capture
18 the full intent -- it was really to capture the full intent of
19 the technology as we had described it in the '540 Patent, but
20 to describe it in a much clearer, more broader context."

21 I asked him: "Did you add anything -- did your lawyers
22 add anything to the '410 when you filed it?" And he said:
23 "No. We just wanted to make it clearer."

24 Then the next slide, please.

25 He said it's a continuation-in-part, and the

1 continuation-in-part, he said, describes and refines the
2 description that's in the parent patent. That's the '540.
3 The '410 doesn't invalidate the '682 Patent. Dr. Metzker
4 walked you through that as well.

5 Could I have the next slide, please? I have already
6 talked a little about that. These are the pictures that we
7 made of the different standards of proof that we believe the
8 Court told you about.

9 Next slide, please.

10 Now, Illumina has the burden of proving invalidity.
11 Dr. Metzker, on the witness stand, you heard Dr. Metzker on
12 the witness stand explain to you why ingredients were missing.
13 But it's their burden, at a clear and convincing standard, to
14 establish that every one of those elements you see on the left
15 are in the '540 and the '410. Did they walk you through them
16 and explain to you why those ingredients are in there or how
17 they are used?

18 They said, here's our list. You have the patents, good
19 luck. You can go find them yourselves. Don't you think --
20 and probably the most important thing you can do when you get
21 back to the jury room is just hunker down and use your common
22 sense on all these questions. Don't you think if you are
23 using your common sense, that if Illumina had evidence to
24 prove this, that they would have walked you through it?

25 Don't you think that if they could have shown, for

1 example, that the Walt Patents had a continuous element or a
2 porous coating, that they would have been screaming from the
3 bleachers about it? They would have walked you through it for
4 a day and made sure you understood where every element was in
5 the '540 and the '410. But they didn't. They just said all
6 the ingredients are in there. Go look it up, if you want to.

7 Next slide, please.

8 My advice -- and it's just my advice -- is that you all
9 spend about as much time deliberating invalidity as the
10 defendant spent putting on their case for invalidity, which
11 consisted of that list of ingredients they hoped you would
12 find if you took the time to go look up the '540 and the '410
13 Patent. That was their invalidity case.

14 Next slide, please.

15 This is the final statement of my presentation, the
16 damages phase. Again, burden of proof on us for infringement.
17 Burden of proof on them for invalidity. Burden of proof again
18 by preponderance of the evidence, slightly more with respect
19 to damages. That's our burden, and we accept it.

20 We presented to you Dr. Ratliff who explained to you how
21 it was that he came up with the █ percent number, and both
22 experts agree that the starting point was the Tufts license of
23 █ percent. Mr. Ratliff told you that Dr. Stuepnagel said
24 during the deposition that when Tufts started bargaining, they
25 wanted █ percent; they settled for █. I pointed out to you

1 that that █ percent that they have gotten in terms of the
2 royalty rate, that they received a very substantial amount of
3 money on, and was a very good deal for Tufts, but that wasn't
4 all they got. They got an extraordinary number of shares.

5 They were conservative. They sold them virtually right
6 away and they made almost \$8 million on them. That's not
7 nothing; that's in addition to the royalty. That's whether or
8 not they'd ever have gotten a royalty; that's if Illumina had
9 stopped making anything to pay royalties on, they still had
10 the stock.

11 But what did we establish? We established that if Tufts
12 had kept their stock, today it would be worth about \$54
13 million. And yet, Illumina's expert wants to tell you, don't
14 look behind that curtain. All Tufts got was █ percent. The
15 stock was completely unrelated. Really? Your common sense
16 tells you that, what was it, 10 percent of the company, or
17 5 percent, some enormous amount was completely unrelated to
18 what Illumina was willing to give and what Tufts demanded that
19 they get? It doesn't make any sense.

20 But it's important that you all understand that big
21 picture because what Illumina is going to tell you is that for
22 Dr. Zebala and Syntrix, we're trying to get two times what
23 Tufts got, twice what they got. That's just not fair. That
24 is not right. You have to look at everything Tufts got and
25 decide, with respect to that package, that's the relevant

1 question for determining what the reasonable royalty rate
2 ought to be.

3 What we are asking for is that Illumina share █ percent of
4 what they have made on the BeadChip with Dr. Zebala and
5 Syntrix because of his contribution to the BeadChip itself.

6 If I could have the next slide, please.

7 Again, a picture is worth a thousand words. Sales of the
8 BeadChip, sale of the SAM. We can talk about the fact that
9 SAM was a great product in 2003. It may have been. We can
10 talk about the fact that it had good margins, all the way
11 through until the time Illumina just quit selling it. Maybe
12 it did. But the evidence -- I was going to say it's black and
13 white -- the evidence is green and orange, that the BeadChip
14 was a phenomenal success for Illumina.

15 Next slide, please.

16 We have talked a little bit about this one. It also
17 allowed BeadChip and Illumina not only to compete with
18 Affymetrix -- and remember what we heard, at the time Illumina
19 was starting, there was really only one Goliath in the
20 industry, and it was Affymetrix, and that didn't change
21 through 2000 to 2005. After 2005, with the BeadChip, the
22 world changed a lot.

23 If I could have the next slide, please.

24 Quickly, I am going to walk through this. This is the
25 reasoning that Mr. Ratliff used. He started with the Tufts

1 license. He considered all these factors, including the stock
2 compensation that Tufts got. He believed, based on all of
3 those factors, it went to █ percent. He then said, I am going
4 to be true to the Tufts logic. Tufts allows for a stacking
5 provision to reduce this by █ percent, and he did. He was
6 faithful in terms of the amounts. He was faithful in terms of
7 the reductions. He reduced it to █ percent.

8 Then he does something that's very interesting, because
9 there were a substantial number of products that you saw. We
10 talked about arrays -- the arrays are the BeadChip. We talked
11 about the assays, the Infinium, the GoldenGate. We talked
12 about the iScan, the reader. Do you remember that? We talked
13 about the software that went with all the stuff.

14 The software is free, basically. But we talked about
15 everything that went with it, and those sales were in the 3
16 and \$400 million range, and he didn't include those in the
17 base. He left those out of the base. That was the discussion
18 we had. I am sure you'll talk about, for many months when you
19 get home, about convoyed sales and how interesting that is.

20 He left those out. But then he said, I am going to adjust
21 up █ percent, and that's how we get to █ percent. The extra
22 percent is to scoop up, which the *Georgia-Pacific* factors
23 allow for, is to make the rate take into account the
24 additional sales that were caused by the BeadChip. And
25 remember that, because it's important for Claim 125, which is

1 the method claim.

2 Remember that we talked about, could you use the iScan
3 without the BeadChip? Nope, it wasn't made for the SAM. It's
4 a reader. It wasn't made for anything else. The only thing
5 you can do -- the only use it has is to work with the
6 BeadChip. There's no nonconforming use; it's a big
7 paperweight. What's interesting is it works in reverse, too.
8 You can't use the BeadChip without the scanner. The same with
9 the assays. We asked: Do the assays work on anything else
10 other than the BeadChip? Nope. GoldenGate? Nope. Infinium?
11 Nope.

12 Does the BeadChip work without the assays? Again, I got a
13 goofy look from the witness stand. No, silly, of course the
14 BeadChip can't work without the assays. That's why they sell
15 them in one package. You can't use any of those products
16 without using the others.

17 So we come to the final slide. This is the final slide.
18 The total accused sales are about \$1.6 billion. We suggested
19 a reasonable royalty rate of █ percent, and you see the math.

20 But before I sit down, I am going to take about two more
21 minutes of your time and remind you, again, the right to a
22 jury is protected in the Constitution. The value of the jury
23 is that you bring your common sense to address complex
24 questions and consider a lot of evidence.

25 You have to be sitting there thinking, I just sat through

1 three weeks where I had one incredibly credentialed person
2 tell me one thing, and someone else tell me just the opposite,
3 over and over.

4 So ultimately, you are the judges of the credibility of
5 the witnesses, the believability of the evidence. That's your
6 job. I will wrap it up by pointing this out. Let's look at a
7 couple of the witnesses that you'll have to consider the
8 credibility of.

9 You have Dr. Zebala. He was on that witness stand for a
10 couple of days. I think he told you the story over three or
11 four hours of how he gave birth to the '682 Patent and
12 everything it took for him to get there.

13 He told you how he couldn't convince anyone to take it, a
14 deal fell through with ABI. But he didn't quit. He started
15 his own business just a few miles down the road, and he's
16 flourished in that business. He's still running it today.

17 You heard him cross-examined by opposing counsel for
18 hours, and that's certainly Illumina's right to do. He
19 withstood any question with dignity, and he provided honest
20 answers. You get to judge his credibility. Compare that to
21 Dr. Stuelpnagel, former CEO of Illumina. There's no question
22 that in 2000, Illumina was searching for an alternate
23 substrate; all the records show that. They were hunkered
24 down. They were trying to release a fiberoptic product that
25 they knew needed something else.

1 What did he tell you about what happened? I don't
2 remember John Zebala. I don't remember getting a package. I
3 don't remember signing this. Okay, maybe that's my signature.
4 We are going in a different direction. You get to evaluate
5 the credibility of the witnesses that have appeared in this
6 case. The road to the courthouse has taken 16 years, all of
7 it in sweat equity by Dr. Zebala.

8 I thank you for your time this morning.

9 THE COURT: I think a 10-minute recess will be
10 adequate here before we hear from Illumina, and then that will
11 probably take us straight through; we'll not take an
12 additional break after that. So we'll complete the oral
13 argument in the next session.

14 As you go to the jury room and out in the hall and so
15 forth, please do not discuss the case yet. We are almost
16 there where you not only may, but you must, have the
17 responsibility to discuss the case among yourselves.

18 THE CLERK: All rise.

19 MR. ROSENBAUM: Your Honor, will Illumina also get a
20 rebuttal with respect to our counterclaim?

21 THE COURT: We hadn't talked about that. It occurred
22 to me that because there is the counterclaim, what is your --

23 MR. ALBRIGHT: I have never seen it done.

24 MR. GILLILAND: It's highly unusual. I have never
25 seen it done.

1 THE COURT: I haven't either. It would be the first
2 for me. I have had many cases where there is a counterclaim
3 in it.

4 MR. ROSENBAUM: Your Honor, I would like the
5 opportunity. With the counterclaim, it's just parallel with
6 their affirmative claim. I think the party with the burden of
7 proof on the claim has the opportunity for rebuttal.

8 MR. GILLILAND: Your Honor, their counterclaims are
9 basically direct responses to our claims, so I don't really
10 see it as necessary, any different than it would be in any
11 other case with an affirmative defense.

12 THE COURT: The Court is going to deny the request.

13 (Morning recess.)

14 THE CLERK: All rise. Court is back in session.
15 Please rise for the jury.

16 (Jury present.)

17 THE COURT: Please be seated. Mr. Rosenbaum.

18 MR. ROSENBAUM: May it please the Court, ladies and
19 gentlemen of the jury: I want to thank you for your careful
20 attention over the last three weeks. Something has been
21 eating at my core, something has been in the pit of my stomach
22 for the last three weeks, and I am glad I have a chance
23 finally to speak to you directly about it.

24 In opening and in closing, Syntrix has accused Illumina of
25 theft. They have accused Dr. Dickinson of theft. They have

1 accused John Stuelpnagel of theft. They have accused Bob Kain
2 of theft. They accused Dr. Black of theft. Theft of an idea,
3 they say, that got Illumina unstuck, that enabled Illumina to
4 go from SAM to BeadChip.

5 So I've been waiting for three weeks to hear, what was
6 that idea? What was the technological roadblock? What was it
7 in the package sent to John Stuelpnagel that allowed a light
8 bulb to go off, that allowed Illumina to say oh, oh, now we
9 see we can go from SAM to BeadChip?

10 You never heard it. There was nothing in that package
11 that would have allowed Illumina to go from SAM to BeadChip,
12 and I will talk about that in some more detail. So we were
13 just criticized for this timeline because the timeline
14 includes that lot of information that doesn't have to do with
15 our invalidity case. That's right. All of the prior art, the
16 publications, the patent applications that we went through in
17 opening and that you heard about in evidence were to rebut the
18 central theme of their case that there was something new that
19 Dr. Zebala invented, that somehow allowed a light bulb to go
20 off in Illumina.

21 What the prior art showed, the blue colors, which weren't
22 even Illumina statements, was that already in the field people
23 were using slides for DNA arrays, people were using particles
24 for DNA arrays. The Chee patent that they say we removed,
25 that was an Illumina patent that you saw that talked about

1 putting beads in slides. That's what that was for. Yes, our
2 invalidity case is limited to the two patents, the two Walt
3 patents, that are on the BeadChip for which Illumina continues
4 to pay Tufts for royalties; that's the invalidity case. The
5 rest of this chart is to show that this copying, this theft
6 theory that's the heart of their case, doesn't stand up.

7 So this is not a case about theft or copying, or it
8 shouldn't be. It's a case about whether Syntrix can prove
9 that the BeadChip on the left contains each and every element
10 of Claim 1 of Dr. Zebala's '682 Patent. His -- and you didn't
11 hear any of this in closing -- his gelled network, his
12 aggregation of particles linked together to form a porous
13 coating three-dimensional network, I didn't hear the phrase
14 three-dimensional mentioned at all in opening or closing.

15 These two products are different. BeadChip is not the
16 porous coating, the gelled network invented by Dr. Zebala.
17 And information in a package describing that is not what the
18 technological key is to going from SAM to BeadChip.

19 And because it's not, because the '682 Patent describes
20 something very different, Dr. Zebala can leave this courtroom
21 with a valid patent. We are not asking you, please invalidate
22 his patent. If you limit his patent to what it really is,
23 which is this three-dimensional gelled network, he can leave
24 the courtroom with a valid patent and maybe he can interest
25 somebody in it. Maybe he can make something of it. Maybe he

1 can profit from it, but he can't profit from the BeadChip
2 which he didn't invent.

3 If you twist this language to cover two-dimensional beads
4 separated from each other in individual wells, then you have
5 to find the patent invalid because that's the Walt '540 Patent
6 and the '410 Patent, patent applications both filed before the
7 '682 Patent. But that's not what his patent describes, not
8 BeadChip.

9 What his patent describes, and what Dr. Zebala described
10 in that multi-media CD that you heard played, and it's
11 Exhibit 311, with the text, what the patent describes and what
12 was in that CD is this porous coating. What he described was
13 a porous coating with particles packed together to increase
14 signal strength 100-fold, 400-fold.

15 The BeadChip does the opposite. It doesn't increase
16 surface area to increase ligand density and therefore signal
17 strength. It does the opposite. Anybody receiving that
18 package, had they studied it, would have said that's not where
19 we are going. We have individual beads in individual wells.
20 We don't do an aggregation of particles linked together in a
21 three-dimensional network to increase ligand density and
22 signal strength. So that's what the case is about. Does
23 Claim 1 cover BeadChip? If so, that it's that broad to cover
24 individual beads randomly assembled in individual wells, then
25 it's invalid.

1 So let me go back to what the case is not about. This
2 theft theme, this copying theme, an issue that has nothing to
3 do with whether or not Claim 1 is infringed. You were
4 instructed by Judge Settle that you may not consider this
5 evidence of alleged copying in deciding whether or not
6 Illumina's BeadChip products infringe Claim 1.

7 It's only relevant, if at all, to this inducement element
8 part of Claim 125. And as you've heard, Claim 125 isn't even
9 an issue if there's no product that infringes Claim 1. So
10 this whole copying story, which is the heart of their case,
11 you may not consider in determining whether there's an
12 infringement of Claim 1.

13 This isn't a copyright case. This isn't a trademark case.
14 This isn't a breach of a nondisclosure agreement case. It's a
15 patent case. The only issue that matters is whether BeadChip
16 contains a porous coating of particles aggregated together in
17 a three-dimensional network.

18 If it is, it doesn't matter if Illumina is aware of the
19 patent for Claim 125. It doesn't matter that you are aware of
20 patents that you don't infringe. You heard that in 2007,
21 Dr. Stuelpnagel gets a call from Syntrix. He says he looked
22 at the patent, and it was clear to him Illumina doesn't
23 infringe. We don't have this porous coating. We don't have
24 particles linked together to form a three-dimensional network.
25 In his own words, he said it's super clear.

1 So knowledge of the patent matters if you are infringing
2 for Claim 125, but it doesn't matter that you know about a
3 patent that you don't infringe. So what really matters for
4 infringement of Claim 1, how can Syntrix prove that BeadChip
5 has each and every element of Claim 1?

6 Next slide.

7 What BeadChip does, just like SAM before it, is put into
8 practice the revolutionary idea that Dr. Walt came up with in
9 1996. His epiphany, the idea that you could precoat beads
10 with different DNA strands or with other probes -- it doesn't
11 have to be DNA -- and allow them to randomly assemble into
12 wells so that in a single test area, you could at the same
13 time, with one sample, test for multiple things at the same
14 time.

15 That was his revolutionary idea that Dr. Zebala didn't
16 even know about when he was working at Children's and writing
17 his patent application. Before we talk about the specific
18 elements of Claim 1, I want to talk about the forest, not the
19 trees, the big picture.

20 Both experts agreed, Dr. Metzker and Dr. Mrksich, that the
21 Zebala patent, the '682 Patent, does not cover the random
22 assembly of beads-in-wells, does not cover random assembly of
23 beads-in-wells. How could it? Dr. Zebala didn't even know
24 about it. He didn't know -- he didn't know about Dr. Walt's
25 publication in analytical chemistry when he was working on his

1 porous coating idea.

2 So to prove infringement, Syntrix must prove to you that
3 this BeadChip, individual beads randomly assembled in
4 individual wells, is covered by the patent for his
5 three-dimensional porous coating of particles aggregated
6 together. He needs to show that his patent for that coating
7 on the right covers individual beads assembled in individual
8 wells on the left (indicating).

9 So, in opening, and they did it again, you heard Syntrix
10 counsel say, well, if you hold it in a certain light -- I
11 think in opening they said if you open your mouth a certain
12 way -- they might look similar.

13 Well, really? That's SAM (indicating). That's BeadChip
14 (indicating). Really, you have to open your mouth a certain
15 way, and in the right light in order to see that they are
16 similar?

17 You heard Dr. Barnard testify. Even he can't tell them
18 apart unless you have some kind of a measurement in the
19 scanning electron microscope image that lets you know, okay
20 that's a 2 micron bead or a 1 micron bead, and we know it
21 can't be SAM because SAM has a 3 micron bead.

22 That's how close they are. They both implement Dr. Walt's
23 revolutionary idea that changed the science that's changed the
24 field of random assembled beads in individual wells. That
25 idea that Dr. Zebala knew absolutely nothing about. That idea

1 that got Dr. Walt elected to the National Academy of
2 Engineering, that revolutionary idea that created Illumina.
3 That's what created Illumina. Random assembly of
4 beads-in-wells.

5 A revolutionary idea that perhaps made Dr. Walt a little
6 wealthier than some of his colleagues at Tufts, but a
7 revolutionary idea that should not earn Dr. Zebala [REDACTED]
8 because he didn't invent it.

9 So in opening and in closing, Syntrix has tried to
10 distinguish SAM from BeadChip, and this is the key to their
11 copying story. And I am going to run through the things that
12 they said were in that package to Dr. Stuelpnagel that allowed
13 SAM to go to BeadChip, all right.

14 Remember, what we are looking for is some kind of
15 technological insight, some light bulb that goes off that
16 allows the scientists and Ph.D.'s at Illumina, brilliant
17 people, to say, oh, we can put beads-in-wells on a flat
18 surface. Here's what they said in opening, that Illumina was
19 stuck in group think. Did you hear any evidence of the group
20 think or how they were stuck?

21 They said BeadChip was necessary to get the IPO going to
22 raise money from the investors. That's what they said in
23 opening. You have the IPO in evidence, the prospectus. It's
24 all about SAM. It's all about SAM. Not a word about
25 BeadChip.

1 They said in opening that Dr. Zebala's package sent
2 Illumina's patent applications in a new direction, in a new
3 direction. Well, we'll talk about that as well. You heard
4 Mr. Albright say that they made promises. Well, these were
5 promises, these were representations, these were statements
6 that they made, and they haven't proved a one of them. They
7 haven't proved a one of them.

8 Illumina wasn't stuck. It was moving forward with SAM,
9 the revolutionary product, a product that changed the science
10 of genomics. A product that was used for 60, 70 percent of
11 all the work done in HapMap. It's what identified the 5
12 million human genetic variations or SNPs. It's what created
13 the opportunity for BeadChip, because now you needed more
14 beads-in-wells because you needed to test for more genetic
15 variations.

16 So now there's a slide with 140 million beads-in-wells
17 that can test for all of those 5 million variations in four
18 different sample regions.

19 It was Dr. Walt's beads-in-wells technology that allowed
20 that advance. There was nothing in the package on porous
21 coating that was sent to Dr. Stuelpnagel.

22 So what was Illumina stuck on? You also heard that while
23 Illumina was working diligently on bringing SAM to market, it
24 was already looking at flat planar substrates. It had its
25 alternate substrate project. That turned into the Odyssey

1 project and eventually BeadChip. We heard nothing about what
2 was in the Stuelpnagel package that somehow held this
3 alternate substrate project move to BeadChip.

4 So what did they say got Illumina unstuck? What was it
5 that Dr. Dickinson, who you saw, that Dr. Barnard, who you
6 saw, that Bob Kain, who you heard from, what was it that they
7 needed to learn to move from BeadChip? You never heard it.

8 So one of the things Syntrix has argued is the name, the
9 name Sentrix used for SAM is similar to Syntrix, and so they
10 say that somehow that was a theft. We don't buy that. You
11 heard testimony that it was actually a naming contest. You
12 heard candid testimony. You heard Dr. Barnard recall it was
13 \$100, the prize. He didn't conform his testimony to that of
14 other witnesses who said it was \$1,000.

15 But leave that aside. How does that unstick group think?
16 How is using a name a technological advance that allows you to
17 get from SAM to BeadChip? Of course it's not.

18 What else did they say was copied? They said that the
19 substrate language in Dr. Dickinson's February 2000
20 provisional patent application was copying from Dr. Zebala's
21 provisional application. You saw that language. It looked
22 nothing like this (indicating) with a listing of glass
23 silicon, germanium, Ge, GaAs, et cetera. It looked nothing
24 like the substrate language that Dr. Zebala himself had lifted
25 wholesale from the Affymetrix patent.

1 Can you imagine what my stomach felt like when they
2 accused Dr. Dickinson of copying this language, when his
3 language looks nothing like this, and it's the very language
4 that Dr. Zebala himself copied from the old Affymetrix patent?
5 That didn't get the scientists at Illumina unstuck from their
6 supposed group think. Illumina was already working, already
7 working on flat planar substrates long before that package to
8 Dr. Stuelpnagel.

9 This (indicating) is Dr. Walt's '410 Patent filed
10 16 months before the package to Dr. Stuelpnagel, 16 months
11 earlier, and he talks about using flat planar surfaces, not
12 fiberoptic bundles.

13 What else do we know that was already going on in Illumina
14 before that package comes in? In the alternate substrate
15 project in June of 1999, a half a year before that package
16 comes in, Illumina is describing an array of array on a chip
17 and talking about using glass and silicon, not fiberoptics.

18 In fact, a year before that, Dr. Barnard in his job
19 interview says, let's put it on a planar surface without light
20 conduits. They weren't stuck on anything. They were already
21 working on this long before the package is sent to John
22 Stuelpnagel.

23 What else did they say besides the planar substrate?
24 Well, the idea of using a microscope slide shape, because
25 that's in Dr. Dickinson's provisional application. That was

1 another technological roadblock that somehow got Illumina
2 unstuck, the idea of using a microscope slide shape, which
3 scientists had been using since the days of Louis Pasteur.
4 Really? You think the scientists and Ph.D.'s at Illumina
5 didn't know about microscope slides?

6 You heard Bob Kain testify, Steve Barnard testify. They
7 were already working with microscope slides. Bob Kain, in his
8 prior work at Molecular Dynamics, was doing DNA microarrays in
9 the shape of microscope slides. So that's not the idea that
10 gets the group think unstuck.

11 You saw Bob Kain's laboratory notebook and Todd
12 Dickinson's laboratory notebook where they both reflect that
13 Bob Kain suggested, hey, how about a microscope slide shape?
14 And that was for the gene expression slide, not the BeadChip.
15 So there was no light bulb that needed to go off.

16 But besides, look at the '682 Patent. It doesn't even
17 tell you to use a microscope slide shape. You saw what
18 Dr. Zebala was working with in his lab. It's not a microscope
19 slide shape. What does the '682 Patent tell you? You should
20 use any convenient shape, a disk, a square, a sphere, a
21 circle. It doesn't even suggest a microscope slide shape.

22 Where did Dr. Zebala get that language? He took that,
23 once again, almost wholesale, from an Affymetrix patent. So
24 the scientists at Illumina, who of course are very familiar
25 with the named competitor Affymetrix, a light bulb goes off in

1 a package that merely repeats language that's already in a
2 Affymetrix patent? Of course not. The heart of their case,
3 the theme of their opening, the theme of their closing,
4 doesn't hold up. There was no group think that got unstuck.

5 The last similarity that they talked about is this
6 checkerboard pattern. Everybody was using checkerboard
7 patterns. That's how you did a DNA array. This is in Todd
8 Dickinson's lab notebook from September of 1999, months before
9 the package goes to John Stuelpnagel. So now we hear
10 criticism, the Affymetrix patent, published in 1995,
11 checkerboard patterns. But let's go back to the prior slide,
12 Todd Dickinson. They criticize that as not being good enough
13 because it was just the shape of the size of a thumbnail.

14 What is the prototype, the size of a thumbnail? That's
15 good enough for Dr. Zebala to claim credit for BeadChip, but
16 not good enough to show that Illumina was already working with
17 checkerboard patterns. I don't think so. It doesn't hold up.
18 No one was stuck on anything. There was no unsticking
19 material in the package sent to Dr. Stuelpnagel.

20 So in opening, Mr. Gilliland said Dr. Zebala sends his Fed
21 Ex package to Dr. Stuelpnagel in late January and Illumina's
22 patent filings changed directions after that. Changed
23 directions. Really? Dr. Walt's '410 Patent was filed
24 16 months earlier. Patent filings didn't change direction.
25 You saw the Apache patent on the chart as well. The patent

1 filings didn't change direction. It says you can use glass,
2 silica, silica-based materials; he's talking about a flat
3 planar substrate, not fiberoptics.

4 So they say well, there's the Todd Dickinson application,
5 but that's not until February of 2000, and it doesn't show
6 anything new about this idea. The '441 patent, which is in
7 evidence, is what resulted from that Dr. Dickinson provisional
8 application in February 2000. This is what it describes.

9 That's not BeadChip. That's why. It's not even listed on the
10 BeadChip package.

11 The '441 isn't listed there. The '540 is. The '410 is,
12 and then these are other patents not related to these issues.
13 So the Todd Dickinson provisional has nothing to do with
14 BeadChip, and the package to Stuelpnagel didn't send
15 Illumina's patent applications in a new direction. The '410
16 had already been filed, 16 months earlier.

17 So you can read every page of that '682 Patent. I don't
18 know that you'll have time or feel the need to do it. It's
19 100 columns. It's 60 pages long. There's not a single
20 diagram, there's not a single photograph, there's not a word,
21 there's not a sentence, there's nothing in that patent
22 application that Dr. Zebala says he sent to Dr. Stuelpnagel
23 that would have unstuck anybody.

24 There's nothing in there like BeadChip. There's no
25 description of BeadChip. There's no recipe for BeadChip.

1 There's no discussion of individual beads in individual wells.

2 It took Dr. Metzker, in this 60-page patent, searching for
3 a little sentence here or a little sentence there, where if
4 you combined them in theory you could force the idea of a
5 single layer of beads. There's nothing in there that provided
6 a technological unsticking for Illumina.

7 What the patent describes, what the multi-media CD
8 describes is something completely different, and that is
9 Dr. Zebala's idea of enhancing signal strength, 100-fold,
10 400-fold, by aggregating these particles together in a
11 three-dimensional network. That's what you heard a younger
12 Dr. Zebala touting on that CD in that PowerPoint. He didn't
13 say anything about individual beads in individual wells.

14 He talks about using inexpensive scanners. In fact, in
15 the audio portion, in Exhibit 311, I think it's in type, he
16 says, "You could image this with a 35-millimeter camera on a
17 microscope."

18 You can't do that with BeadChip. You need scanners that
19 cost hundreds of thousands of dollars. Why is that? Because
20 the dim image of each individual bead, 3 microns, 2 microns, 1
21 micron, each needs to be read separately. You heard that the
22 increase in signal strength of a single bead compared to flat
23 glass, is only four-fold.

24 Dr. Zebala's patent criticizes other prior art that gave
25 you a 10-fold increase. That's not enough. He was going for

1 100-fold increase, 400-fold increases, and the way you get
2 there is by this three-dimensional network.

3 BeadChip went in the opposite direction, and so if
4 Dr. Stuelpnagel -- and he didn't deny getting the package. He
5 says, I don't remember it, which isn't a surprise. He
6 received hundreds of these packages a year. So if he got
7 it -- and Dr. Zebala says that after receiving it,
8 Dr. Stuelpnagel said no thanks, we're going in a different
9 direction.

10 Illumina did go in a different direction. It went in
11 randomly assembled beads-in-wells and not this gelled network
12 of particles linked together in three dimensions. If you look
13 at the patent application, if you look at the marketing CD,
14 there's nothing in there describing individual beads-in-wells.
15 There's nothing in there describing a silicon dioxide surface
16 of a flat slide as being a polymeric binder.

17 The polymeric binder describing the patent is created by
18 the sol-gel method where each of the beads are connected
19 together as you saw in the diagrams. There's nothing in that
20 package that gets the scientists at Illumina unstuck.

21 So let's talk now about some of the trees in the forest of
22 Claim 1, and all you need to do is be satisfied that one of
23 these elements is missing, and there's no infringement, and
24 there's no invalidity; he can go home with the patent he
25 invented.

1 So Claim 1 requires a gelled network, and then gelled
2 network is defined, and that includes the requirement that the
3 porous coating have particles linked together to form a porous
4 three-dimensional network.

5 How do you form a three-dimensional network of particles?
6 Well, its plain meaning, when you take things that have three
7 dimensions themselves, but then you arrange them in a network,
8 this is what a three-dimensional network looks like
9 (indicating).

10 It doesn't take a scientist to know this. If you take
11 soup cans and you arrange them two-dimensionally, you are
12 arranging them in one layer. Each soup can has three
13 dimensions, but you are arranging them in two dimensions.

14 What Syntrix is asking is that you essentially delete
15 three-dimensional from the definition. If particles are
16 three-dimensional, you don't need to say a three-dimensional
17 network. You just say a network of particles. It has to add
18 meaning, and it's this plane meaning that you heard from
19 Dr. Mrksich. They are arranged in three dimensions.

20 That's consistent with the rest of the patent. It's
21 consistent with the rest of the patent, and that's important.
22 In the glossary definition that you received, there's a
23 definition of "abstract." There's a definition of "drawings."
24 And you heard, as I went through this with probably three
25 witnesses, but primarily with Dr. Mrksich, if you look at the

1 abstract, you look at the drawings, you look at all the
2 examples, every one of them describes something that's a
3 three-dimensional network in the plain meaning sense, which is
4 the way you arrange them. So here's what the glossary says
5 about "abstract" and "drawings."

6 I will read it to you. It's in the back of your
7 instructions.

8 "Abstract is a brief summary of the technical disclosure
9 in the patent to enable the U.S. Patent and Trademark Office
10 and the public to determine quickly the nature and gist of the
11 technical disclosure in the patent."

12 When you read the abstract, it's all about increasing
13 density of ligand attachment for increasing signal strength.

14 What are drawings? "The drawings are visual
15 representations of the claimed invention." Of the claimed
16 invention.

17 The definition of claims. Yes, ultimately you have to
18 decide this based on the language of the claim. This is
19 Instruction 13. The figures and text in the rest of the
20 patent provide a description and/or examples of the invention
21 and provide context for the claims. Provide context for the
22 claims.

23 So that's the exercise that I went through with
24 Dr. Mrksich. You start with the plain meaning,
25 three-dimensional when you look at the rest of the patent and

1 does it confirm this? Absolutely. Absolutely. The abstract,
2 the background section, all about the fundamental purpose of
3 this patent, all about the fundamental purpose of increasing
4 signal strength by aggregating these particles.

5 Remember that paragraph that discusses if you get to a
6 smaller particle size, there's a greater -- there's a 400-fold
7 increase in signal strength? That only works when it's
8 three-dimensional. It only works when it's three-dimensional
9 when you add additional layers by the particles getting
10 smaller.

11 So besides the plain meaning of "gelled network," besides
12 the abstract, the background section, all of the figures and
13 drawings and photographs, all 24 examples besides all of those
14 confirming that three-dimensional network means in three
15 dimensions.

16 We also see how others in this field were applying that
17 same concept at the time. When you take objects that are
18 obviously three-dimensional, everything is, a single atom is
19 three-dimensional; when you arrange them in a planar format,
20 in one layer, that's two-dimensional. We saw this language
21 from the Seul Patent, and also from the Seul Patent a planar
22 array of beads. And the Walt Patent itself, the Walt '410
23 Patent, which again predates the package to Stuelpnagel by 16
24 months.

25 The preferred embodiment. As we all know, what he's

1 talking about is beads at the top of the fiberoptic bundle,
2 although the '410 talks about other surfaces as well. He
3 talks about the X-Y coordinate, and he talks about
4 two-dimensional configurations as well as three-dimensional.
5 The three-dimensionals, he gives the example of the porous
6 block of plastic where it goes up. But generally, the
7 substrate is planar. That's the surface of the fiberoptics or
8 most of the other substrates that are disclosed here.

9 So Dr. Mrksich is right that "three-dimensional" means
10 three-dimensional. It means more than one layer. That's the
11 only definition that makes any sense, reading this patent.

12 So what did Dr. Zebala say about three-dimensional? He
13 said, it's really a network of voids. Really? That's not
14 what it says. It says it's a network of particles. He also
15 describes it as like a sponge. Well, we don't really disagree
16 with that. This is a close-up of his porous coating
17 (indicating). It is like a sponge.

18 But that's nothing like BeadChip. BeadChip isn't in a
19 sponge. It's randomly assembled beads in one layer, each
20 separated from another, in an individual well. So what does
21 Dr. Metzker do? He scours the patent, skipping over the
22 abstract, the background section, all 24 examples, all of the
23 diagrams, all of the figures, to search for provisions where
24 in theory one could get down to a single layer; if you take
25 the smallest coating described and the largest particle

1 described, you could in theory get down to a single layer.

2 Let's go to the next slide.

3 That's the 400-pound baby examples. Perhaps it's crude
4 that you heard from Dr. Mrksich that, sure, people range from
5 18 inches to 7 feet. They range in weight from 12 ounces, I
6 guess, up to 400 pounds. But there's no such thing as a
7 400-pound baby. There's no such thing as a 400-pound baby in
8 this patent. How do we know that? Because the definition
9 tells us that. The abstract tells us that. The background
10 section tells us that. Every figure, every photograph tells
11 us that. All 24 examples tell us that.

12 I won't go through the other provisions. You saw where he
13 hunts and pecks to try to find something, something that will
14 overcome this plain language and that will overcome the
15 abstract and all the rest of the patent. It just doesn't cut
16 it.

17 Let's go up to the next slide.

18 All right. So at the end of the day, this element on
19 three-dimensional, Syntrix can't meet its burden of proving
20 that BeadChip arranges its beads in a three-dimensional
21 network.

22 If you agree with that, your work is done on invalidity.
23 And that first question you check "no" for 3 micron beads,
24 "no" for 2 micron beads, and "no" for 1 micron beads. Your
25 work is done on that whole front section of the verdict form.

1 But let me talk about another element that's also missing.
2 Again, you don't even need to worry about this if you agree
3 with us on three-dimensional, and that's the requirement that
4 the particles be linked together. But as you saw, the
5 particles in BeadChip are nothing like the particles that are
6 linked together as described in the Zebala patent.

7 Figure 1A that shows the circle around each bead. This is
8 the porous coating, the circle -- I think it was number 28,
9 29. I forget which is described -- that's the polymeric
10 binder. That's the polymeric binder. That's nothing like the
11 silicon dioxide layer that Dr. Metzker says is the polymeric
12 binder that he finds in BeadChip.

13 That's created by the sol-gel method described in the
14 patent where you mix the beads in solution and it dries and
15 you wind up with a polymeric binder around each particle.
16 That makes them stick together in this aggregation of
17 particles that are linked together.

18 That's what the patent describes what Dr. Metzker needs to
19 do that satisfy this element for BeadChip, is tell you that
20 the slide itself is a polymeric binder. But he has to admit
21 that the patent says silicon dioxide can be the substrate,
22 because it says that. And he has to admit that the surface of
23 the substrate can be made from something different from the
24 rest of the substrate, including silicon dioxide.

25 So you have a BeadChip, it's made of silicon and silicon

1 dioxide that the patent says is a substrate, or the surface of
2 a substrate. And Dr. Metzker needs to say, no, no, no, I am
3 now redefining that as being the polymeric binder, which looks
4 nothing like that Figure 1A, which isn't made through the
5 sol-gel method.

6 He says, I am going to redefine it. And how does he get
7 there with that movie he created which suggested that it's
8 actually added on top. And we know it's not. We know it's
9 grown within through this oxidation process. It's not added
10 on top.

11 So if you read the patent and you agree with Dr. Mrksich's
12 correct reading of it, there's no linking because the only way
13 to link is through a polymeric binder, and there's no
14 polymeric binder in BeadChip.

15 Let me talk about known discrete full thickness volume. I
16 know it's a confusing concept, but it's another element that
17 is lacking. This idea perhaps works with Dr. Zebala's porous
18 coating. You may recall this testimony. I asked him, how do
19 you know when you have a known discrete full thickness volume
20 with his coating. And he says, if you take a pipette and you
21 apply the compounds there, where they are applied is the known
22 discrete full thickness volume. That doesn't work with
23 BeadChip, with randomly assembled beads.

24 So Dr. Metzker needs to come up with this theory where
25 sort of after the fact you sort of identify it, but that's not

1 what the patent says.

2 Let's go to the next slide.

3 It's all arbitrary because you saw how Dr. Metzker drew
4 it. This is how Dr. Zebala drew it (indicating). They are
5 different. They can't even -- even the author of the patent
6 and the expert in court don't know really how to find a known
7 discrete full thickness volume. When the multiple beads are
8 next to each other, it's anybody's guess. On the left is how
9 Dr. Metzker defined it, drew it. (Indicating). But as
10 Dr. Mrksich showed you, there's an infinite number of ways
11 that you can try to draw it where two beads are next to each
12 other.

13 So let me talk about some other claim terms that may apply
14 just to certain BeadChips, and I think that's why in your
15 verdict form there's some questions you are asked, 3 micron, 2
16 micron, 1 micron. If you agree with us that there's no
17 three-dimensional network, then it's no, no, no, for all
18 three.

19 If you agree with us that there's no linking, even if you
20 think there's a three-dimensional network, it's no, no, no,
21 for all three.

22 If you agree with us that even if you think there's a
23 three-dimensional network with particles linked together but
24 there's no known discrete full thickness volume, it's no, no,
25 no, for all three.

1 But here's where you need to do some further analysis if
2 you get that far, and I hope you don't. One element is
3 substantial uniform thickness, and the definition is very
4 clear; the coating can't vary by more than 30 percent over the
5 entire coated area.

6 So here's another disagreement between Dr. Metzker and
7 Dr. Mrksich. Dr. Mrksich does an analysis using actual
8 manufacturing data, using his formula which later on
9 Dr. Metzker tried to adopt, and what that shows is that when
10 you measure substantial uniform thickness over the entire area
11 for the 1 micron and the 2 micron products, the variation is
12 greater than 30 percent.

13 These are current slides. And then on this page and the
14 next are previous slides (indicating), but it's only the 3
15 micron products that satisfy that requirement.

16 So on the verdict form -- on the verdict form, on this
17 element and this element alone, we agree that the 3 micron
18 beads have substantial uniform thickness as defined, but not
19 the 1- and 2 micron beads.

20 You will recall there's a difference in methodology.
21 Dr. Metzker criticizes Dr. Mrksich because he says that
22 Dr. Mrksich is including the high points, Mount Rainier -- I
23 think I said Mount Washington -- but, of course, the
24 definition says across the entire coated area. If there were
25 a Mount Rainier, you'd have to count it.

1 And even Dr. Mrksich didn't do that, he used one standard
2 deviation, so he wasn't looking for the highest point, he was
3 looking for one standard deviation, which you heard on a
4 BeadChip with 100 million beads would be 400,000 beads.

5 And of course, in BeadChip you can't have any Mount
6 Rainiers because once a bead is much more than 50 percent out,
7 it's going to fall out. So you are talking about a relatively
8 narrow range.

9 Let me talk about void regions. Void region requires --
10 well, Claim 1 requires that the article have void regions
11 ranging from 1 to 1500 nanometers in diameter. And here
12 again, the experts take very different approaches. What
13 Dr. Metzker does is try and look for every little nook and
14 cranny underneath the bead, between the bead and the well
15 bottom, or the side of the well -- and of course, you'll
16 always find with any kind of BeadChip or porous coating or
17 whatever you are looking at that has particles, you are always
18 going to find something as small as 1 nanometer, because if
19 you get -- take a particle or bead and you measure it from the
20 closest point between what is touching, it's always going to
21 be 1 nanometer.

22 But that only works if you agree that the silicon dioxide
23 layer is in fact a polymeric binder that's part of the porous
24 coating. And it's not. So all you are left with is what's
25 above that line in the BeadChips, then the only relevant void

1 regions are the spaces between the beads, and that's what
2 Dr. Mrksich looked at. So that's the result. Only the 1
3 micron beads, only the 1 micron beads have spaces that are
4 close enough that fall under 1500 nanometers.

5 So here it's the opposite of what we looked at for
6 substantial uniform thickness. Here we agree that for this
7 element, and obviously not the others, the 1 micron beads have
8 void regions less than 1500, but not the 2 and the 3 micron
9 beads.

10 The last claim element I am going to talk about is
11 continuous. The patent requires that the surface of the
12 substrate, the substrate, have virtually no discontinuities or
13 gaps. Dr. Mrksich's analysis of this is pretty
14 straightforward. The substrate is the slide, and in BeadChips
15 (indicating) because of the way the beads-in-wells are
16 arranged, there are large discontinuities and gaps. And
17 therefore, for this product, for this claim element, all of
18 the BeadChips don't contain it.

19 But Dr. Metzker does a different analysis. He looks --
20 let's go back to the prior slide. He looks at just the
21 stripes, ignores the rest of the substrate, and he says that
22 what you are really looking for is empty wells and if there's
23 a certain percentage of empty wells within the stripe, then it
24 does or doesn't satisfy the requirement of virtually no
25 discontinuities or gaps.

1 That's pretty remarkable. So here Syntrix is claiming
2 that BeadChips stole an idea that he had in his '682 Patent,
3 but here (indicating) this doesn't infringe if, under the
4 latest opinion from Dr. Metzker, there's only an 80 percent
5 fill rate, that this (indicating) does infringe because it's
6 91 percent or 98 percent, and this does infringe, but this one
7 doesn't infringe (indicating).

8 Really? Is that what we are coming down to in deciding
9 whether or not BeadChip is really described in the '682
10 Patent? But let's talk about Dr. Metzker's analysis. You
11 heard him in deposition. I couldn't have been any more clear
12 in my question, and this is at a time when he's thinking
13 98 percent is enough because I think the beads in BeadChips
14 are at a 98 percent level.

15 He had heard some deposition testimony, but somebody who
16 was sort of guessing that that's probably the rate. So I
17 asked him:

18 "Question: What percentage -- what percentage of gaps or
19 discontinuities is allowed without failing the virtually no
20 discontinuity or gap requirement?"

21 "Answer: I would say less -- equal to or less than
22 2 percent." Well, in other words, 98 percent fill rate,
23 2 percent empty rate.

24 He wasn't giving me an example. I wasn't asking him for
25 an example. I didn't put here, but you heard the follow-up

1 questions: "What's your basis for that? Can you cite me any
2 scientific literature?" "No, no, it's just my best judgment."
3 That's what he said.

4 So what happened after that? When we learn of this
5 98 percent theory, we get the actual PBeads data, and lo and
6 behold -- lo and behold, for a large percentage, a large
7 percentage of BeadChip products made over the years, they were
8 less than 98 percent fill rate.

9 In fact, all of the BeadChips made in 2005 had less than
10 98 percent.

11 In 2006, 73.6 percent had less than 98 percent.

12 In 2007, et cetera, we are getting a little better but
13 still a quarter failed that requirement (indicating).

14 So what then happens? A new opinion, a new opinion. Now
15 it's 90 percent. Really? 90 percent? One in ten is
16 virtually none? Virtually no? If you've got a 10 percent pay
17 raise, would that be virtually not a pay raise at all? I
18 don't think so, not in real life and not in science.

19 It's their burden to prove damages. They have had all of
20 our manufacturing data. They have had this information, and
21 they have failed to give you any damage figure applying a
22 98 percent fill rate for the beads. That was their burden.

23 So if you get this far, if you think they have met every
24 other element, except for certain beads, the 98 percent level,
25 the damages still have to be zero because they haven't proven

1 that.

2 Before I get to invalidity, let me talk about this
3 remarkable letter that Syntrix sent to Children's Hospital,
4 sent in January of 2010 because they were preparing to sue
5 Illumina for patent infringement on the '682 Patent and only
6 the '682 Patent.

7 You heard them trying to explain this away. Well, it was
8 generally talking about all of our patents. No, it wasn't.
9 It pretended to be. There was a very specific purpose, and
10 that was to get Children's to release any interest that it had
11 in this patent.

12 You've heard from Judge Settle, we are not contesting
13 title. This is not a claim by Children's against Dr. Zebala
14 for misrepresentation or fraud. But it is relevant. It is
15 relevant, you heard from Judge Settle, for infringement, for
16 credibility, for date of invention. And it's very telling,
17 because what does he say to Children's? There has not been
18 any commercialization, any sales of any of the research
19 Dr. Zebala conducted at Children's and UW. Yet, their whole
20 case here is asking you to say that yes, Illumina has
21 commercialized, has commercialized that research.

22 He wasn't talking about that he personally hadn't
23 commercialized. He was telling Children's, trying to convince
24 Children's, don't worry, my patent, my research has no value,
25 so you can just sign this release. Well, you should hold him

1 to what he told Children's. There's been no
2 commercialization, and the reason is BeadChips don't use the
3 '682 Patent, don't infringe the '682 Patent.

4 Let me now move to invalidity. As I said, we didn't come
5 to court asking you to invalidate the patent. It's what
6 Dr. Zebala is forcing us to do.

7 Yes, could they predict what our case would be about, we
8 don't infringe? I think you can expect most defendants to say
9 that. And if we do infringe, the patent is invalid, of course
10 it is, of course it is, because BeadChip is using the '540
11 Patent and the '410. It wasn't much of a prediction. That's
12 what these cases are all about.

13 But if Dr. Zebala's patent doesn't cover the random
14 assembly of beads, you can find it invalid. But if BeadChip
15 is covered by the '682 Patent, the product that is the result
16 of the '540 and the '410 Walt Patents, then you have to find
17 the '682 Patent invalid.

18 Let me start with the '410 Walt Patent. It's filed on
19 September 11, 1998, months before Dr. Zebala filed his
20 provisional application in December of 1998. And that's why
21 they fight so hard for this early invention date, this early
22 reduction to practice date.

23 We got an advance copy, at least a black and white copy of
24 their slide.

25 Is this working now or not? I will hold it up. I don't

1 know if you can see it. But they show the Walt '540 Patent
2 here, and an invention date that he claims of August 5, 1997,
3 and then he says actual reduction to practice on August 28th,
4 shows the Walt '410 filed here, and of course his patent isn't
5 filed until later.

6 Then he draws a line saying diligence. So he can get an
7 earlier date, he can get an earlier date of invention and beat
8 the Walt '410 Patent, only if he proves diligence, only if he
9 proves diligence, and he's got to do more than just saying I
10 was diligent. He has to corroborate. He has to corroborate.

11 There's this large period here between when he left the
12 lab in the end of July 1998, and when he filed his patent
13 application; a four-month period where you heard -- I asked
14 him and I asked Dr. Metzker, is there any corroboration
15 whatsoever what you did on any day, any diary entry, any
16 calendar entry? None, absolutely nothing.

17 You saw how every other scientist that's been on the stand
18 and has had their lab notebooks examined, they dated every
19 page, they numbered every page, somebody signed every page.

20 What's remarkable about Dr. Zebala's lab notebook is none
21 of that happened. Not a signature, not a page number.
22 There's some litigation page numbers that the lawyers added at
23 the bottom with a bunch of letters and numbers, but he didn't
24 number them, he didn't sign them.

25 Even after he left the lab, he wouldn't have a lab

1 notebook for this period between July and December. He has no
2 paperwork showing what he did, and that's his obligation. So
3 he can't beat the '410 Patent that was filed before he filed
4 his application.

5 But let's go back to the Children's letter and see what he
6 said about this very issue. He said, "We are unable to
7 determine what information came from the use of facilities at
8 UW or at Children's, or was obtained by Dr. Zebala's research
9 conducted after completing his residency."

10 He's now asking for a reduction to practice of 1997, when
11 he's still in the lab, and yet he's telling Children's here,
12 you know, I am not sure when I did my inventing, it might have
13 been after I left the lab in 1998. You need to hold him to
14 what he told Children's to get the release.

15 That takes us to December 1998, the only date he's allowed
16 to have without corroboration and due diligence. You also
17 heard, when I asked him in deposition, when he was serving as
18 the designated corporate representative -- what we call
19 30(b)(6) -- on this topic, the topic was date of reduction to
20 practice, and I asked him the question and he said December 1,
21 1998, the date of his filing.

22 He didn't say August of 1997. You should hold him to what
23 he said in his deposition, and you should hold him to what he
24 told Children's. When you do that, the Walt '410 is prior art
25 because it was filed before he filed his application in 1998.

1 So let's go through the invalidity analysis of Claim 1.

2 Can we go to the next slide?

3 So we were criticized because we didn't take Dr. Mrksich,
4 on about the last day of trial when you had heard all this
5 stuff for three weeks, for not showing you and blowing up each
6 and every column and line on all of these elements. We didn't
7 need to do that. The only ones they contest, you recall, are
8 substrate, continuous and substantially uniform thickness.

9 Those are the only boxes that they put up, and so that's what
10 we focused on and we did talk about it.

11 I talked about it with Dr. Mrksich on direct and
12 Dr. Metzker on cross. And they said -- at least Dr. Mrksich
13 did -- substrate exists in both the '540 Patent and '410. The
14 '410 is clear it could be any surface, it could be a flat
15 silicon surface. The '540 describes the optical fiber
16 bundles.

17 But remember, we are using their analysis; under their
18 analysis, the fiberoptics bundles can be a substrate. And you
19 saw where in the '680 patent it says that the substrate can be
20 virtually anything, including a strand, including a strand.
21 So substrate exists in both the '540 and the '410. Same thing
22 with continuous.

23 This was remarkable. Dr. Metzker says, we know that
24 continuous doesn't exist in the Walt patents because just look
25 at the picture, and the pictures there, not every bead -- not

1 every well has a bead in it. But how does he apply that
2 analysis on infringement where he wants you all to ignore
3 every photograph and every diagram. Well, he can't have it
4 both ways for purposes of invalidity.

5 We showed you where in the text of both the '540 and the
6 '410 Patent it talks about putting a bead at the end of each
7 fiber. So what's good for Dr. Metzker for infringement is
8 what you need to apply for invalidity. And the same thing for
9 substantially uniform thickness. You heard Dr. Metzker say
10 that in the etching process, you can control the depth of the
11 well, you can control the size of the bead, so of course
12 substantially uniform thickness is described in both patents.

13 So we did our job, and I hope we did it as quickly as we
14 could on one of the last days of trial.

15 So, let me talk about the written description issue. So I
16 have talked about now anticipation; that is, for invalidity
17 purposes, if the '682 Patent is as broad as they say it is, it
18 was anticipated by both the '540 Patent and the '410. The
19 other issue you have is written description, and this is just
20 the flip side of what we were talking about with
21 three-dimensional network.

22 The claim language, if it's interpreted to mean a single
23 layer of beads, fails the written description requirement
24 because when you read the rest of the patent, you read the
25 abstract, you read the background section, you read everything

1 about it, there's no description anywhere of a porous coating
2 made up of just a single layer of particles.

3 All of the examples, all of the images, all of the
4 discussion, discusses porous coatings with multiple layers, so
5 it would fail the written description requirement.

6 We had another written description point as well, and that
7 has to do with particle size. Claim 1 doesn't discuss -- at
8 least specifically; they say it's implicit -- a size of a
9 particle. But somebody reading the patent would know, would
10 know that there's a limitation to particle size. And you need
11 to go no longer to this language that you've seen many times
12 at column 27, and this is the paragraph, one of the many
13 paragraphs talking about the purpose of the patent and
14 increasing signal strength and surface density.

15 And Dr. Zebala says in contrast, "A primary particle size
16 greater than 1000 angstroms yields porous coatings with
17 surface areas too small to be useful in the present
18 invention."

19 In other words, you are not going to get the signal boost
20 with this three-dimensional coating if you go any larger than
21 1000 angstroms. And yes, there's a reference somewhere to
22 2000 angstroms. But that's it.

23 Let me go back to this slide that you saw in opening, just
24 to give you some relative idea of what we are talking about.
25 These little brown -- those little brown circles (indicating).

1 Those are the particles discussed by Dr. Zebala in his patent.
2 The larger of the three tiny brown particles is 1000
3 angstroms, the largest useful size described by Dr. Zebala in
4 his patent.

5 The two sizes below that, 500 angstroms, that's what he
6 used to create his porous coating, that's what he worked with
7 in the lab. Again, you heard, you may recall, this is 2
8 microns thick so this is 40 particles high, at least, if they
9 were stacked end on end. And then there's 200 angstrom
10 particles because he also worked with that in the lab.

11 This blue circle (indicating), that's a 1 micron bead.
12 That's the smallest bead used in BeadChip, 10 times larger
13 than that most useful size of the largest useful size
14 described in the patent; 20 times larger if you go to the 2
15 micron bead, and we don't even have 3 micron bead on there.
16 So that's why -- another reason for invalidity if the patent
17 is stretched as broad as they want you to stretch it. We are
18 not asking you to stretch it. They are asking you to stretch
19 it.

20 So I have talked about infringement, and I have talked
21 about invalidity. I have to talk about a subject I don't want
22 to talk about, and that's damages, because if you reject all
23 of our arguments, and I hope you don't, you have to make this
24 analysis. So let me talk about the obvious first, which is
25 any percentage times zero is zero, and that's what I hope you

1 decide.

2 Mr. Albright predicted exactly what I am going to say
3 because it's the truth. They are asking you to award a
4 royalty rate that is tried -- that is [REDACTED] what Tufts
5 receives -- received in the beginning and receives to this
6 very day -- on every BeadChip that is sold, [REDACTED] the royalty
7 that Illumina paid for this ground-breaking revolutionary
8 technology.

9 [REDACTED] the royalty rate that Illumina has been paying for
10 the technology that founded the company, for the technology
11 that allowed it to go public, the technology that created --
12 made the HapMap Project a success.

13 So Syntrix wants [REDACTED] that royalty rate for a porous
14 coating idea, this gelled network of particles, that nobody
15 uses, wants [REDACTED] percent for that.

16 You recall Dr. Zebala tried -- tried to sell his idea. He
17 went to 13 companies, including Illumina. Dr. Stuelpnagel
18 apparently said no thanks, we are going in a different
19 direction, as they did. Nobody was interested in it. Why?
20 Because it was going in the wrong direction. It wasn't
21 focused on being able to test individual small samples like
22 BeadChip does. It was trying to increase signal strength.

23 The only person -- the only company interested, you heard,
24 was Applied Biosystems, ABI, where Dr. Zebala had an inside
25 track because his friend and mentor, Dr. Barany from Cornell,

1 had a connection, but even they backed out because they were
2 worried about Affymetrix's patents.

3 So you can't get █ percent, twice what's paid to Tufts for
4 groundbreaking technology, for an idea that nobody was
5 interested in. To this day, to this day, nobody's been
6 interested. To this day, not a single porous coating has been
7 sold. To this day, this is all that exists of that gelled
8 network of particles idea.

9 So let's look at the analysis of Mr. Cook. He starts with
10 the Tufts license. He makes appropriate upward and downward
11 adjustments. I won't go into all of the reasons here.
12 Hopefully you'll recall some of the reasons, but he winds up
13 with █ percent on arrays only.

14 And he does something similar to Dr. Ratliff. He then
15 says okay, because the royalty base will be on total sales,
16 not just BeadChips, but also the whole kits, you lower the
17 rate, as did Dr. Ratliff, to account for that, and you wind up
18 with █ percent. The result of that is these numbers
19 (indicating). Remember, he's using actual sales as opposed to
20 orders.

21 At █ percent on all slides, if you think they all
22 infringe -- and I hope you don't -- it's █. If you
23 think that some slides failed the substantial uniform
24 thickness, so you exclude those, it's █. I am
25 rounding up.

1 If you think the slides satisfy the substantial uniform
2 thickness requirement but not void region, so it's only the 1
3 micron slides, then it's [REDACTED].

4 I am done with damages. But the number is zero. The
5 number is zero because BeadChip is a very different product
6 than what Dr. Zebala described in his '682 Patent. It's a
7 product built on Dr. Walt's revolutionary idea of random
8 assembly of beads-in-wells. It's a product perfected into a
9 commercial product by years of hard work at Illumina, tens of
10 millions of dollars of investment. It's nothing like the '682
11 Patent and it doesn't infringe.

12 The information you heard over the last three weeks, I
13 know was very technical in nature, but it's important. It's
14 important to both parties, and I hope you have realized, and I
15 hope I brought into focus the big technological gap in their
16 story. There was nothing that got Illumina unstuck. All
17 Illumina has been doing from day one is beads-in-wells, the
18 idea that Dr. Walt came up with.

19 So I know it was tough, and I am sure some of you felt
20 like you were back in school again. But you should all be
21 proud of performing your civic duty. I know we all appreciate
22 it.

23 In the end, your decision is straightforward. BeadChips
24 do not infringe. They are not a gelled network aggregated in
25 three dimensions.

1 Thank you for your time.

2 THE COURT: We are going to take a brief recess,
3 10 minutes, give everybody a chance to refresh and then we'll
4 close out the trial.

5 THE CLERK: All rise.

6 (Jury not present.)

7 THE COURT: Mr. Gilliland, what is your estimate?

8 MR. GILLILAND: Probably about 30 minutes or less. I
9 will try to keep it under that as best I can.

10 THE COURT: That will be fine. That will take them
11 to the noon hour and then they will have their lunch break.

12 MR. ALBRIGHT: Thank you, Your Honor.

13 (Morning recess.)

14 (Jury present.)

15 THE COURT: Please be seated.

16 THE CLERK: All rise, Court is back in session.

17 THE COURT: Mr. Gilliland, are you going to use the
18 Elmo?

19 MR. GILLILAND: I may, Your Honor. If it acts up, I
20 have got a backup plan.

21 THE COURT: It has to transition over from the
22 computer base to that, but it should have warmed up quicker.
23 I am not sure why it didn't.

24 THE CLERK: I think it's because of the remote. Do
25 you have the wireless remote? I think that's what does it;

1 they are using the wireless remote.

2 THE COURT: Okay.

3 MR. GILLILAND: If it acts up, I will improvise, but
4 I think we can cover it.

5 THE CLERK: Please rise for jury.

6 (Jury present.)

7 THE COURT: Everyone, please be seated.

8 You may proceed, Mr. Gilliland.

9 MR. GILLILAND: Ladies and gentlemen, thank you very
10 much for your time and attention these past couple weeks. I
11 am sure you feel like it's been drinking from a fire hose at
12 times because of the amount of information that's been thrown
13 at you by the lawyers and witnesses involved. And I can see
14 each of you have been paying attention and taking notes, and
15 we all appreciate that very much.

16 Now, I want to respond to one thing that Mr. Rosenbaum
17 said right out of the box is that he had this feeling in the
18 pit of his stomach, and I really do regret that he feels that
19 way about it. But this case is not about the way
20 Mr. Rosenbaum feels; it's about the facts.

21 And so let's go over just a few of those facts, and I am
22 going to try to do this fairly quickly. I am not going to
23 respond to everything, because you've heard the evidence,
24 you've taken the notes. You don't need me to rehash all of
25 that for you.

1 Now, the first thing when we started the case, I told you,
2 you were going to hear from the defendants that they were
3 going to deny, deny, deny. And then it turns out they were
4 going to try to blame Dr. Zebala for things, which they have
5 done.

6 But we know from the start that they did get Dr. Zebala's
7 information in 2000. We have -- we've heard the testimony of
8 Dr. Stuelpnagel; of course he did not come into court. But --
9 if we could go to the next slide, please. We've shown you,
10 and you'll have this back there in the jury room with you,
11 Exhibit 7; it's the NDA with Dr. Stuelpnagel's signature right
12 there on the bottom of the second page.

13 Dr. Zebala showed you the Fed Ex mailer that went out the
14 very next day. This is dated, and you can see the date at the
15 top of the second page, the very top of the page. It's dated
16 January 20, 2000. It went by fax, so he got it. He got the
17 information the very next day.

18 And we've gone through the things that were sent. They
19 even played some of it into evidence. You saw the slide show.
20 You heard Dr. Zebala's voice from 13 years ago or so. And so
21 they know they got it. Included in that package was this,
22 which you'll see (indicating). This is going to go back to
23 the jury room with you as well, it's Exhibit 64, A-64, and
24 it's Dr. Zebala's patent application that ultimately became
25 what you also have as Exhibit 288, the '682 Patent. You will

1 have this back there with you as well.

2 All of that information was received and sent to and
3 received by Illumina around the end of January 2000. And then
4 10 days later, the same person who signed this NDA,
5 Dr. Stuelpnagel, got an invention disclosure form that he
6 filed with the United States Patent and Trademark Office. And
7 that's the one that we think shows they had knowledge of
8 Dr. Zebala's patent and his patent application at that time.
9 And knowledge is important for the 125 claims, and we'll get
10 to that.

11 Now, one interesting thing that Mr. Rosenbaum said was,
12 that if you think that the idea was disclosing slides, well
13 Louis Pasteur was using slides, too. How do you think that
14 Dr. Zebala got a patent if all that is described in here is
15 the use of a slide? There's a lot more than that. They know
16 it, and you know it.

17 And what Dr. Zebala disclosed to them was how to put a
18 porous coating on a slide to use it as a genetic array. And
19 that's what all the testimony has been about.

20 And the first question you are going to be faced with when
21 you get back there and have to fill out this verdict form is
22 going to be basically their first denial. They deny they
23 infringe. Well, when you look at the verdict form, Section
24 No. I is the infringement claims. And that's the first thing
25 you are going to have to address.

1 Now, the important thing to keep in mind -- and we've
2 talked about it a little bit -- are the different standards of
3 proof that apply to the different parts of the case.

4 And you've heard standards of proof, I am sure watching
5 TV. If you are like I am, I like *Law & Order*; so I see the
6 standard of proof there is beyond a reasonable doubt, that's a
7 criminal case. Well, here, the standard of proof is
8 preponderance of the evidence. And the Court has defined that
9 for you in the instructions that you've gotten. And
10 instruction No. 11 says that a preponderance of the evidence
11 means that must be persuaded by the evidence that the claim is
12 more probably true than not true.

13 And so when you go through the evidence in the case, when
14 you get back there and are considering this, you've got to
15 consider the evidence for both Claims 1 and 125 for the three
16 micron chips. Were those infringed as -- has Syntrix proven
17 by a preponderance of the evidence that those claims were
18 infringed?

19 Well, let's talk a little bit about the evidence that you
20 have, that you've seen. And the main evidence of that, of
21 course, is the experts that you heard. And we brought you
22 Dr. Metzker, who actually worked on the Human Genome Project,
23 who's from the Human Genome Sequencing Center out of Houston,
24 who has done work on behalf of the states of Texas, Louisiana,
25 and Washington. And he walked you through the elements. He

1 went from the Court's instructions to the sections in the
2 patent, to the technical documents he had received from the
3 defendant, and showed you how they infringed.

4 The defendants brought you Dr. Mrksich, whose only work in
5 the past four years as an expert witness has been for
6 Illumina. They are the only ones he's done anything for.

7 But in addition to that, you are going to have something
8 else when you get back there. As my co-counsel mentioned, you
9 are going to have your common sense. And you are also going
10 to have Exhibit 714, Dr. Zebala's prototype (indicating). And
11 you can see it (indicating), it's cut down so it could go into
12 an SEM microscope so he could take those pictures that we saw.

13 But you can see two of the prototypes that he's held onto
14 since 1998. And you are also going to have Exhibit 716. This
15 is an example of the BeadChip (indicating). And I think when
16 you look at those you are going to see a lot of similarities.

17 And when considering that, along with all the evidence you
18 received, I will submit to you that in answering Question No.
19 1 -- if I can bring up the Elmo, please; see if we can get it
20 to work this time.

21 When you get to answer Claim 1, you should answer "yes"
22 for the 1 BeadChip products.

23 "Yes," for the 2 BeadChip products.

24 "Yes for the 3 BeadChip products. And the same thing for
25 the 125, all the way down.

1 And you are also going to have to address third-party
2 infringement. Now, that's talking about when customers take
3 the BeadChip products and they use them with the readers and
4 the assays and everything else that Illumina sells.

5 Following the instructions that Dr. Metzker described for
6 you, that Illumina provides to its customers on how to use the
7 BeadChip, so when you are answering Question No. 2, "Has
8 Syntrix proven by a preponderance of the evidence that
9 Illumina's customers have directly infringed Claim 125 of the
10 '682 Patent," I submit to you that your answer should be
11 "yes."

12 And then you'll have to move to these indirect
13 infringement questions that have to do with inducement.

14 This thing likes to switch modes; apparently that's where
15 this flicker comes from.

16 The first question you have to answer, contributory
17 infringement: "Has Syntrix proven by a preponderance of the
18 evidence that Illumina has contributed to the infringement by
19 Illumina's customers of Claim 125?" Well, for contributory
20 infringement, that's where this knowledge comes into play.
21 That's where the fact that they knew about the '682 Patent,
22 they knew about the '682 Patent application, comes into play.
23 Because when you read those instructions, when you go to --
24 let me see here if I have it tabbed right -- I believe it's
25 Instructions 18 and 19. No. 19 talks about contributory

1 infringement. And one of the elements for contributory
2 infringement is that Illumina is aware of the '682 Patent and
3 knows that the products or methods for which the component or
4 apparatus has no other substantial use may be covered by Claim
5 125.

6 You heard at the close of evidence that Illumina
7 acknowledges it knew at least in January 2007, when Dr. Zebala
8 reached out to them; but you also know because of the
9 nondisclosure agreement and Dr. Zebala's testimony that they
10 knew about this patent as early as 2000.

11 So knowledge is important for contributory infringement,
12 and that's how you know they knew about it and you know they
13 infringed.

14 So I submit to you when you are answering Question No. 3,
15 Claim 125, right here on the top -- I am not sure what page I
16 am in the verdict form -- but on the top of the next page
17 there, your answer, I submit, should be "Yes" for all three
18 BeadChips as to whether or not they contributed to
19 infringement.

20 Then you get to the second indirect infringement, that's
21 inducement of infringement. That's the instruction No. 18 in
22 the package you have. That describes for you what's necessary
23 for inducement of infringement.

24 And again, this knowledge is important. Now, again, they
25 have acknowledged back to 2007 -- and we've proven they knew

1 back to 2000. And it says that Illumina was aware of the '682
2 Patent and knew that the acts it had taken by Illumina's
3 customers would constitute infringement of Claim 125, or
4 Illumina believed there was a high probability that the action
5 taken would constitute infringement of Claim 125 and
6 deliberately avoided confirming that validity.

7 You've seen evidence they've known about it. Dr. Metzker
8 has testified to you about it. The only way to practice Claim
9 125 is to take the BeadChip and use it and perform the steps
10 of Claim 125 applying the reagents and checking everything.
11 So I submit to you when you are answering Question No. 4 on
12 the verdict form, you should answer "yes" for all three
13 BeadChip products.

14 Then it says proceed to section II. Well, the first part
15 of Section II has to do with the invention date. And you also
16 have a definition in here for the invention date. And that,
17 of course as you've already heard, is the date the patent was
18 filed, which is called constructive reduction to practice; or
19 it can be back to the date of conception if you've got
20 corroboration and diligence all the way to the date the patent
21 was filed.

22 And so when you are answering the first question: "Has
23 Syntrix proven by a preponderance of the evidence that the
24 invention date for any claim of the '682 Patent is prior to
25 December 1, 1998, the date the patent application was filed,"

1 we submit to you that you should answer "Yes," Syntrix has.

2 And you heard Dr. Zebala talk about the dates and refer to
3 that date in August 5th, 1997, in his notebook. But you also
4 heard Dr. Metzker say: Well, I saw the notebook. Dr. Zebala
5 wasn't quite as sophisticated, I suppose, as some of the
6 people at Illumina; so he didn't date and have every page
7 witnessed because he never imagined that he'd need this
8 notebook so many years later in a courtroom in Tacoma. But
9 you saw he pointed to that page; and by matching that page to
10 a fax from DaGussa, that explained how to use the beads,
11 Dr. Metzker was able to pinpoint the date of August 5th, 1997,
12 as well.

13 So I submit when you are answering Question No. 6, you
14 should write in "August 5, 1997," for both Claims 1 and 125.

15 Now, the next thing you get to after that is Illumina's
16 next denial.

17 First, they deny they infringed. But if you don't buy
18 that, they deny that it's valid. Well, let's talk about that
19 for a minute.

20 The first thing to keep in mind is when you are addressing
21 these validity questions, you notice right here on the first
22 line, "Did Illumina prove by clear and convincing
23 evidence," -- that's that higher standard we were talking
24 about. It's a higher burden than preponderance of the
25 evidence. And that, as the Court has instructed you, which

1 you can read in instruction 11, says that clear and convincing
2 means you must be persuaded by the evidence that the claim or
3 defense is highly probable; that it's highly probable that the
4 '682 Patent is invalid.

5 Well, let's talk about that. The first thing is
6 Dr. Metzker walks you through the '682 Patent.

7 You remember where he walked you through infringement
8 element by element. That's this one (indicating).

9 But he also walked you through the references that they
10 assert, the Walt '540 and the Walt '410. And for both of
11 those he found multiple missing elements from each of those.

12 Contrary to what Mr. Rosenbaum said, it wasn't just
13 continuous that was missing from both, remember? It was also
14 porous coating, because porous coating, under the '682, has
15 the "does not swell" requirement. And Walt '540 and '410
16 taught the muffins rising in a muffin tin.

17 So it was missing continuous. It was missing porous
18 coating. And it was missing substantially uniform thickness,
19 which was unimportant for Walt '540 and '410 because Walt only
20 did experiments with fiberoptics where he was looking through,
21 and the uniformity didn't really matter.

22 But you don't just have to rely on that. Most
23 importantly, the Walt '540 was considered by the patent office
24 when someone put the patent into re-exam. And remember now,
25 re-exam is not a situation where the patent office goes out

1 looking for patents to re-examine. Someone has to ask for it
2 to be done; and someone did. And the Walt '540 was part of
3 that.

4 And that's why, when you get back to the jury room, if you
5 look at Exhibit 288, and you go back here (indicating), almost
6 to the last page, the third from the last page, you will see
7 the Walt '540 is specifically listed on the face of the 288
8 patent. It was considered by the re-exam.

9 And that's important, because as the Court has instructed
10 you, and you'll see here, I believe it's No. 25, the Court
11 says "When a party attacking the validity of a patent relies
12 on prior art which was specifically considered by the examiner
13 during the prosecution of the application leading to the
14 issuance of the patent" -- which is what happened with Walt
15 '540 in the re-exam -- "or during re-examination of the
16 patent, that party" -- here being Illumina -- "bears the
17 burden of overcoming the deference due a qualified government
18 agency official" -- a patent examiner -- "presumed to have
19 performed his or her job." So you've got that in there, too.

20 And so when you consider all of that -- wait, I almost
21 forgot, you are also going to have the SAM, which is beads on
22 fiberoptic bundles.

23 And when you look at the SAM, and you look at Dr. Zebala's
24 prototype -- the blue part actually goes down. Everybody
25 keeps setting it upside down. When you look at Dr. Zebala's

1 prototype -- and you can open it up and take a closer look --
2 you can see that they appear very different.

3 So that, combined with what you know from the presumption
4 of validity, the fact that Walt '540 went through the patent
5 office, and Dr. Walt himself said that the '410 is just a
6 continuation of it, he didn't do any more experiments in
7 between, you know that when you get to the questions of
8 anticipation, Question No. 7, for both the Walt '540 and the
9 '410, I submit that you should answer "No."

10 The evidence supports validity and does not come anywhere
11 close to overcoming the presumption or meeting the clear and
12 convincing standard.

13 Now, there's also this written description requirement
14 where they say the patent doesn't describe beads of 1 or 2 or
15 3 micron size, or doesn't describe the gelled network; and I
16 don't want to rehash all of that because you've heard a lot
17 already on it from the experts, but there is one aspect I want
18 to bring up. They keep talking about how there's no
19 description of a monolayer, and that a single layer can't be a
20 gelled network.

21 But what they give you is this board (indicating). That
22 one, they only want to talk about this part (indicating), just
23 three-dimensional. Forget the fact that it says porous, or
24 that it's an aggregation of particles linked together in a
25 porous three-dimensional network. And they don't want to show

1 you the rest of the definition where a polymeric binder is
2 specifically described as silicon dioxide which is, as
3 Dr. Metzker told you, is what's on the BeadChip.

4 So that the patent does disclose, and does cover
5 monolayer. And you also know because they keep pointing to
6 the Seul Patent, and the fact that the Seul Patent was a
7 monolayer; and it may use the words three-dimensional and it
8 may have that Seul uses two-dimensional, or something like
9 that. Well, I think this may have been where Mr. Rosenbaum
10 was going with this chicken analogy yesterday. I didn't quite
11 follow it. But just because Seul calls it two-dimensional
12 doesn't mean it's different than a gelled network.

13 And in fact, you can tell that the patent office
14 considered one row of beads to be a gelled network, because
15 the patent office considered that Seul Patent application
16 during the re-exam.

17 When you look, again, at the third from the last page, the
18 re-examination certificate, Seul is actually this one towards
19 the bottom (indicating) that's listed as 97/40385.

20 So even the patent office saw that monolayer is the same
21 thing because they said hey, this is similar, let's check it
22 out and see if the '682 Patent should be issued despite that.

23 So because of that, when you get to this written
24 description requirement, "Has Illumina proven by clear and
25 convincing evidence that the specification of the '682 Patent

1 does not contain an adequate written description of any of the
2 claims," I submit your answer should be "No" for both Claim 1
3 and 125.

4 And then finally we get to the damages question. And we
5 told you they would deny infringement. But if you don't buy
6 that, they deny that it's valid. But if you don't buy that,
7 we don't owe them that much. And then they even give you a
8 few different options to pick from. Well, let's talk about
9 that real quick. The first thing to keep in mind, the most
10 important thing to keep in mind is what you have to consider
11 for damages.

12 In this case it's a reasonable royalty. And one word --
13 or not word, but a couple of words that Mr. Cook, Illumina's
14 expert, didn't really emphasize -- I am probably pushing my
15 luck by trying to zoom this thing -- which you see in
16 instruction 30 is that a reasonable royalty -- Syntrix is
17 entitled to at least a reasonable royalty to compensate it for
18 any acts of infringement.

19 And if you go back to the instruction right before that,
20 instruction No. 29, the Court reinforces for you that Syntrix
21 is entitled to recover no less than a reasonable royalty; no
22 less than.

23 Now, their expert claims that that number should be
24 █ percent. That's where he thinks you should start with your
25 "no less than" analysis.

1 We submit to you that that wholly underestimates the
2 damages of the royalty that's due to Syntrix in this case.
3 And they are trying to fool you by pointing you to the Tufts
4 license and say you should just look at number -- just look at
5 the █ percent in the Tufts license.

6 Well, you know that license was struck in 1998. And when
7 you get to evaluating the reasonable royalty, you've got to
8 look at 2005. Things don't stay constant in those seven
9 years, and the reasonable royalty rate should not stay
10 constant in those seven years.

11 In addition to that, in 1998 we've heard Tufts got a lot
12 of stuff. I've forgotten the numbers exactly, because I get
13 it confused what Tufts got and what Dr. Walt got. Because
14 Tufts got what they apparently cashed out around 2000, around
15 7 or \$8 million; and Dr. Walt has already cashed out around 40
16 or more million dollars, and still has more stock left.

17 So it's not just █ percent that Tufts got back in 1998.
18 It was █ percent plus some kickers.

19 And again, that was seven years before the agreement of
20 the hypothetical negotiation that would have taken place in
21 2005 between Illumina and Syntrix.

22 Now, talking about money on an idea or an invention might
23 seem sort of trivial. But I submit to you that's one of the
24 things our country was built on. The right to inventors to
25 hold patents is one of the few things engrained in the actual

1 body of the Constitution. It wasn't one of the Bill of
2 Rights. Even our right to a jury trial had to be added later
3 as one of the Bill of Rights. But the founding fathers saw
4 inventions and ideas as important. And we all know they are,
5 because we all know about Edison and the Wright brothers and
6 Alexander Graham Bell and other people who came up with great
7 inventions that helped build big things as time went by.

8 Well, I submit to you that for this genetic microarray
9 world, the '682 Patent was just such an invention.

10 Now, Mr. Cook, he comes in and says well, Dr. Zebala
11 talked to 13 companies and nobody took it. I think the reason
12 we are here today is because somebody did. I think we've
13 proven to you that somebody was using his invention.

14 And there's two problems with his logic: one, how often
15 have you tried to sell something and it sold to the first
16 person you talk to? And then what are you thinking if that
17 happens, right? I didn't ask for enough, I guess, because it
18 was too good of a deal. That rarely ever happens.

19 And two, more importantly, who's going to pay you for
20 something if somebody else is already using it without paying
21 you? If somebody else is already infringing and not paying
22 you a nickel, how are you going to sell it now, right?

23 And more importantly, here's what I think is most telling,
24 folks, is you've been here the past 2 1/2 weeks. I have been
25 here the past 2 1/2 weeks. Dr. Zebala, the CEO of Syntrix,

1 has been here every day as well. And even some of his
2 employees have been coming, because they are interested in
3 what's going on and they care about what happens here today.

4 Illumina didn't even bring Dr. Stuelpnagel down here in
5 person. They played a video of him. And their CEO never set
6 foot in this courtroom. And the person they sent down here,
7 Mr. Kain, who I consider to be a nice gentleman, but for the
8 purposes of this case his testimony was so important he was
9 only on the stand for ten minutes. That's how much attention
10 Illumina is paying to this case, and that's how much attention
11 you should pay to the royalty rate that they are trying to
12 sell you.

13 And because of that, I think you should pay more attention
14 to Mr. Ratliff's number. And when you get down to that
15 reasonable royalty rate, and you consider what Mr. Ratliff has
16 told you, and you consider how their sales took off when they
17 finally got this product to market, the one that infringes, I
18 submit to you that that █ percent was a deal. That would have
19 been a very good deal for Illumina in 2005.

20 So when you are filling in this number, keeping in mind
21 the instruction that it's "no less than," I submit to you that
22 you should write "█ percent" as the reasonable royalty rate,
23 at least █ percent; as the Court instructed you, that's your
24 starting point.

25 Now, the number -- the lines may be a little confusing,

1 but if you do █ percent, and you apply that to the almost --
2 it was a hair under, I think their sales were \$1.596 billion,
3 as opposed to \$1.6 billion, but if you apply that █ percent to
4 their sales, you are going to come up with a total damage
5 number -- which I submit to you, you should come up with -- of
6 █.

7 And that, ladies and gentlemen of the jury, would
8 compensate Dr. Zebala for the fact that somebody took his idea
9 after all that hard work, and ignored him in 2000, ignored him
10 again when he went back in 2007; and it wasn't until he
11 finally was able to call them into court, to the one place
12 where a giant corporation and an individual are equal in our
13 country, that he was finally able to get an accounting for it.

14 And once they are here, and once they have to answer to
15 you, you shouldn't short change him. You shouldn't give him
16 less than a full measure of justice. And so you should go
17 with the full █ percent. For every dollar that Illumina made,
18 they need to share, of that 80 to 90 percent of profit that
19 they make, they need to share █. That's
20 all.

21 And that, I submit, is a reasonable royalty that Syntrix
22 and Dr. Zebala and everyone that works there have waited a
23 long time to receive.

24 Thank you.

25 THE COURT: All right. I am now going to release you

1 to the jury room. I think lunch should be waiting there for
2 you. And you are now permitted, and required, to discuss the
3 case among yourselves. And we will wait for your word.

4 THE CLERK: All rise.

5 (Jury departed at 12:20 p.m. to begin deliberations upon a
6 verdict.)

7 THE COURT: 15 minutes, that's the -- I want you to
8 be within 15 minutes to respond to any questions we may get.
9 Of course, it could be the verdict. But my primary concern
10 there is getting questions and being able to respond timely.

11 MR. GILLILAND: Do we need to leave cell phone
12 contacts or anything with Gretchen?

13 THE COURT: Yes, if you would. And if you just have
14 a card, you can put it down there. She went in to assist with
15 the lunch.

16 (Court in recess pending jury deliberations.)

17 * * *

18 (In open court at 3:10 p.m. for verdict.)

19 THE CLERK: All rise, Court is back in session.

20 THE COURT: All right. It has been reported that the
21 jury has reached a verdict.

22 What I will do is inquire as to who the foreperson is,
23 receive the verdict and ask if it is unanimous, and then I
24 will have Gretchen read the verdict.

25 Then I will ask her to poll the jurors to ensure that that

1 is not only the verdict of the jury but their individual
2 verdict. If it appears to be inconsistent, then I will excuse
3 them into the jury room.

4 THE CLERK: Please rise for the jury.

5 (Jury present.)

6 THE COURT: Please be seated.

7 Has the jury reached unanimous verdict?

8 PRESIDING JUROR: Yes, we have, Your Honor.

9 THE COURT: If you would hand that to Ms. Craft, the
10 jury verdict, please.

11 All right, will you please read it?

12 THE CLERK: We, the jury, unanimously agree to the
13 answers to the following questions and return them under the
14 instructions of this Court as our verdict in the case.

15 Question No. 1: Direct infringement:

16 Has Syntrix proven by a preponderance of the evidence that
17 Illumina literally infringes any of the following claims of
18 U.S. Patent No. '682?

19 As to Claim 1: 1 micron BeadChip products: "Yes." Claim
20 125: "Yes."

21 2 micron BeadChip products Claim 1: "Yes." Claim 125:
22 "Yes."

23 3 micron BeadChip products Claim 1: "Yes." Claim 125:
24 "Yes."

25 Question No. 2: Indirect infringement - third-party

1 infringement:

2 Has Syntrix proven by a preponderance of the evidence that
3 Illumina's customers have directly infringed Claim 125 of the
4 '682 Patent? "Yes."

5 Question No. 3: Indirect infringement - contributory
6 infringement:

7 Has Syntrix proven by a preponderance of the evidence that
8 Illumina has contributed to the infringement by Illumina's
9 customers of Claim 125 of the '682 Patent?

10 1 micron BeadChip products Claim 125: "Yes."

11 2 micron BeadChip products Claim 125: "Yes."

12 3 micron BeadChip products Claim 125: "Yes."

13 Question No. 4: Indirect infringement - inducement of
14 infringement:

15 Has Syntrix proven by a preponderance of the evidence that
16 Illumina has induced Illumina's customers to infringe Claim
17 125 of the '682 Patent?

18 1 micron BeadChip products Claim 125: "Yes."

19 2 micron BeadChip products Claim 125: "Yes."

20 3 micron BeadChip products Claim 125: "Yes."

21 Question No. 5: Invention date - patent:

22 Has Syntrix proven by a preponderance of the evidence that
23 the invention date for any claim of the '682 Patent is prior
24 to December 1, 1998, the date the patent application was
25 filed? "Yes."

1 Question No 6: Rate date - patent claims:

2 What is the invention date for each asserted claim of the
3 '682 Patent?

4 Claim 1: August 5, 1997.

5 Claim 125: August 5, 1997.

6 Question No. 7: Invalidity - anticipation:

7 Did Illumina prove by clear and convincing evidence that
8 any of the listed claims of the '682 Patent is invalid because
9 it is anticipated?

10 Claim 1: Walt '540 Patent: "No." Walt '410 Patent:
11 "No."

12 Claim 125: Walt '540 Patent: "No." Walt '410 Patent:
13 "No."

14 Question No. 8: Written description requirement:

15 Has Illumina proven by clear and convincing evidence that
16 the specification of the '682 Patent does not contain an
17 adequate written description of any of the claims?

18 Claim 1: "No." Claim 125: "No."

19 Question No. 9: Damages:

20 If you have found that an Asserted Claim of the '682
21 Patent is infringed and not invalid, what amount has Syntrix
22 proved it is entitled to as a reasonable royalty?

23 Rate: percent.

24 Total damages:

25 Signed March 14th, 2013, by the jury foreperson.

1 THE COURT: All right. I am going to now ask
2 Ms. Craft to ask each one of you if this is your verdict and
3 the unanimous verdict of the jury?

4 THE CLERK: Juror No. 1, is this your verdict?

5 JUROR NO. 1: Yes.

6 THE CLERK: Is this the verdict of the jury?

7 JUROR NO. 1: Yes.

8 THE CLERK: Juror No. 2, is this your verdict?

9 JUROR NO. 2: Yes.

10 THE CLERK: Is this the verdict of the jury?

11 JUROR NO. 2: Yes, it is.

12 THE CLERK: Juror No. 3, is this your verdict?

13 JUROR NO. 3: Yes.

14 THE CLERK: Is this the verdict of the jury?

15 JUROR NO. 3: Yes.

16 THE CLERK: Juror No. 4, is this your verdict?

17 JUROR NO. 4: Yes.

18 THE CLERK: Is this the verdict of the jury?

19 JUROR NO. 4: Yes.

20 THE CLERK: Juror No. 5, is this your verdict?

21 JUROR NO. 5: Yes.

22 THE CLERK: Is this the verdict of the jury?

23 JUROR NO. 5: Yes.

24 THE CLERK: Juror No. 6, is this your verdict?

25 JUROR NO. 6: Yes.

1 THE CLERK: Is this the verdict of the jury?

2 JUROR NO. 6: Yes.

3 THE CLERK: Juror No. 8, is this your verdict?

4 JUROR NO. 8: Yes.

5 THE CLERK: Is this the verdict of the jury?

6 JUROR NO. 8: Yes.

7 THE COURT: All right, the verdict will be filed.

8 I want to commend you, as the parties already have. This
9 was a long trial. It was certainly as complicated a trial as
10 one would expect to participate in.

11 If there was a medal of valor, I award each one of you
12 that for paying close attention and fulfilling your
13 responsibilities as jurors.

14 So with my deep appreciation and thanks, you are now
15 discharged. If you like, you may stay after; the attorneys
16 may be interested in asking you some questions. They cannot
17 ask questions about the details of your deliberations,
18 generally more about the overall conduct of the trial and how
19 you felt it went and that sort of thing.

20 You are certainly not required to, and neither are they,
21 under our local rule, permitted to contact you. So you
22 certainly don't have to participate in any discussion with
23 them, and you are welcome to leave.

24 THE CLERK: All rise.

25 (Jury departed at 3:20 p.m.)

1 THE COURT: So then if you all -- you may be seated.
2 If you all wish to do as I indicated and participate,
3 generally what I will do is I will let the lawyers sit,
4 basically where you are sitting there, and the jurors, who may
5 want to participate, would sit back in the gallery there. As
6 I said, it's important not to get into any kind of
7 deliberations. It's a secret process, and so I will be
8 present as well to ensure that you don't go into areas that I
9 think are improper.

10 The Court anticipates motions; and we can, assuming the
11 motions are going to be made, will set up a briefing schedule
12 for that. And we can probably do that before you leave today,
13 if you like.

14 MR. ROSENBAUM: Your Honor, besides the briefing
15 schedule, there's a question of determining supplemental
16 damages through trial; and perhaps more importantly, the
17 timing of entry of judgment. Typically that will occur after
18 a determination of supplemental damages. We need to make sure
19 that we know there will be no immediate judgment entered,
20 given the post-trial matters to proceed.

21 THE COURT: For appeal.

22 MR. ROSENBAUM: For appeal, or for stay, whether we
23 need to move for stay of execution. None of that is triggered
24 until after entry of judgment.

25 THE COURT: Correct. What is your proposal with

1 respect to the supplemental damages?

2 MR. ROSENBAUM: We haven't talked about a mechanism
3 for doing that. The briefing schedule, I presume, will be
4 done by the Court, perhaps through some -- again, a briefing
5 schedule.

6 THE COURT: All right. Let me do that. I take it
7 the parties would like a briefing schedule that would
8 probably, on the supplemental damages, be over a period of --
9 I should think 30 days.

10 MR. GILLILAND: Sounds reasonable to Syntrix, Your
11 Honor.

12 MR. ROSENBAUM: I think we'll try to work out a
13 schedule. They need supplemental information which we need to
14 gather. It needs to be analyzed by two sides, experts
15 presumably. There may not be disagreement on the math.

16 THE COURT: Let's put it this way, no judgment will
17 be entered. It sounds like to me the parties can agree to a
18 schedule here that would be likely satisfactory to the Court.

19 MR. ROSENBAUM: And the question of -- obviously
20 central is the *Markman* issue and whether a monolayer is
21 permitted under the claim construction.

22 That could be briefed in post-judgment briefing, which
23 would technically require entry of judgment. But perhaps
24 there's a more expedited way to proceed with that, whether
25 it's reconsideration of the Rule 50(a) motions or supplemental

1 *Markman* briefing. It seems to me that's obviously a critical
2 question.

3 And I don't know if you are aware, Your Honor, as you've
4 heard the evidence whether they pushed it up to the top of the
5 hill or didn't push it up to the top of the hill; but
6 obviously that's a critical question.

7 There are others that are addressed in the motions, but
8 that's an all or nothing question.

9 THE COURT: I understand, but I think that the
10 procedure should be as it routinely would be, and that is that
11 will be a post-judgment motion.

12 So that briefing schedule will trail the first.

13 MR. GILLILAND: Your Honor, just briefly, I know that
14 we've talked about the Rule 50(a) motions on the record. And
15 I know, to preserve their points, they did file their Rule
16 50(a) brief last night. My understanding is that the Court
17 was just denying those, but I wanted to get clarification as
18 to whether we needed to respond to that or to consider it
19 denied.

20 THE COURT: No, I think I denied that, so you don't
21 need to reply to that; but there will be a briefing schedule
22 with regard to the 50(b).

23 MR. GILLILAND: I understand.

24 MR. ROSENBAUM: As post-judgment briefing goes
25 forward, obviously we'll be seeking a stay of execution, if

1 there's not a stipulation, and the stay of execution without a
2 bond.

3 And I think particularly, in light of the critical *Markman*
4 issues, it would be appropriate.

5 We are not arguing it now, but it's kind of a head's up
6 for an issue that we are looking at down the road.

7 THE COURT: All right, that will follow the entry of
8 the final judgment.

9 MR. ROSENBAUM: Yes.

10 THE COURT: Then that question, as well as the 50(b)
11 motions, will be briefed and determined.

12 MR. GILLILAND: Nothing further from us, Your Honor.

13 THE COURT: All right. You probably gathered that
14 this Judge was at times overwhelmed by the complexity of the
15 technology. I certainly feel I know it much better today than
16 I did before we began this trial. And the fact that I do is a
17 tribute really to both parties here and the tremendous job
18 that each side did here in taking what remains a very complex
19 subject, even though you tried to describe it in opening
20 statements as really basically simple. I never thought that
21 it was simple. But you did a great job of bringing this
22 microbiology technology to a place where I think the jury was
23 able to understand it; and so I commend you, both sides, for
24 the work that you've done in connection with this case.

25 MR. ROSENBAUM: Thank you, Your Honor.

1 MR. GILLILAND: Thank you.

2 (Proceedings adjourned at 3:25 p.m.)

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6 C E R T I F I C A T E

7

8 I certify that the foregoing is a correct transcript from
9 the record of proceedings in the above-entitled matter.

10

11 /S/ Teri Hendrix

11 June 10, 2013

12 Teri Hendrix, Court Reporter

12 Date

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